

# **Wichita Existing Buildings Rehabilitation and Change of Use Code**

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# **Table of Contents**

<b>TITLE AND SCOPE</b>	<b>1-1 THRU 1-3</b>
<b>ENFORCEMENT AND PERMITS</b>	<b>2-1 THRU 2-2</b>
<b>DEFINITIONS</b>	<b>3-1 THRU 3-2</b>
<b>ALTERATIONS AND REPAIRS TO EXISTING BUIDINGS</b>	<b>4-1 THRU 4-18</b>
Repairs	4-1, 4-2
Heights and Areas	4-3
Life Safety	4-3 thru 4-9
Interior Finish	4-9
Shaft Enclosures	4-9, 4-10, 4-11
Fire Separation and Smoke Barriers	4-11, 4-12
Fire Suppression Systems	4-12, 4-13
Fire Alarms	4-13, 4-14
High-Rise Buildings	4-14
Boiler/Furnace Equipment Rooms	4-15
Structural Requirements	4-15
Other Safety Features	4-16, 4-17
Interior Space Dimensions	4-17
Commercial Kitchens	4-18
Accessibility	4-18 and 7-1 thru 7-3
<b>MINIMUM PROVISIONS FOR CHANGE OF USE AND OCCUPANCY</b>	<b>5-1 THRU 5-9</b>
General	5-1, 5-2, 5-3
Fire and Life Safety	5-3, 5-4
Enclosure of Vertical Shafts	5-4
Exterior Wall Fire-Resistance Ratings	5-5
Structural Safety	5-5
Handrails and Guards	5-6
Health and Hygiene	5-6
Mechanical Requirements	5-6
Electrical Requirements	5-6, 5-7
<i>Hazard Categories and Classifications Tables</i>	5-8, 5-9
<b>HISTORIC STRUCTURES</b>	<b>6-1 THRU 6-4</b>
<b>ACCESSIBILITY FOR EXISTING BUILDINGS</b>	<b>7-1 THRU 7-3</b>

## **Chapter 1**

### **TITLE AND SCOPE**

**SECTION 101 — TITLE. THESE REGULATIONS SHALL BE KNOWN AS THE WICHITA EXISTING BUILDINGS REHABILITATION AND CHANGE OF USE CODE, MAY BE CITED AS SUCH, AND WILL BE REFERRED TO HEREIN AS “THIS CODE.”**

### **SECTION 102 — PURPOSE**

The purpose of this code is to encourage the continued use or reuse of legally existing buildings and structures.

### **SECTION 103 — SCOPE**

The provisions of this code shall constitute the minimum requirements for change of occupancy, alteration or repair of existing buildings and structures. Whenever reference is made to the appendix in this code, the provisions of the appendix shall not apply unless specifically adopted.

### **SECTION 104 — NONCONFORMING RIGHTS**

Buildings in existence at the time of the adoption of this code may have their existing use or occupancy continued if such use or occupancy was legal at the time of the adoption of this code, provided such continued use is not dangerous to life and that subsequently adopted regulations specifically applicable to existing buildings or structures are satisfied.

Nothing in this code shall be construed to allow the degradation of those systems, devices and equipment required by the code under which the building was constructed.

### **SECTION 105 — ADDITIONS, ALTERATIONS AND REPAIRS**

**105.1 Additions, Alterations and Repairs.** Buildings and structures to which additions, alterations or repairs are made shall comply with all the requirements of the Building Code for new construction except as specifically provided in this code. Additions, alterations or repairs may be made to any building or structure without requiring the existing building or structure to comply with all the requirements of the Building Code, provided:

1. Additions shall conform to requirements for a new building or structure.
2. Any building plus new additions shall not exceed the height, number of stories and area specified for new buildings except as permitted in this code.
3. Any building so altered, which involves a change of occupancy, shall not exceed the height, number of stories and area permitted for new buildings except as permitted in this code.
4. Additions or alterations shall not be made to an existing building or structure that will cause the existing building or structure to be in violation of any of the provisions of this code, or cause an unsafe condition.
5. Alterations or repairs to an existing building or structure that are nonstructural and do not adversely affect any structural member or any part of the building or structure having required fire resistance may be made with the same materials of which the building or structure is constructed, except as required by the individual chapters of this code. See Chapter 4 of this code for requirements for the installation or replacement of glass.

**105.2 Added Lateral–force–resisting Elements.** Alterations of existing structural elements or additions of new structural elements, which are not required by other sections of this code and are initiated for the purpose of increasing the lateral–force– resisting strength or stiffness of an existing structure, need not be designed for forces conforming to these regulations provided that an engineering analysis is submitted to show that:

1. The capacity of existing structural elements required to resist forces is not reduced;
2. The lateral loading to required existing structural elements is not increased beyond their capacity;
3. New structural elements are detailed and connected to the existing structural elements as required by the building code;
4. New or relocated nonstructural elements are detailed and connected to existing or new structural elements as required by the building code; and
5. An unsafe condition as defined above is not created.

## **SECTION 106 — CHANGE OF OCCUPANCY**

Any change of occupancy of an existing building or structure shall comply with the provisions of this code. Any building that involves a change in use or occupancy shall not exceed the height, number of stories and area permitted for new buildings, except as permitted in this code.

## **SECTION 107 — MAINTENANCE**

All buildings and structures and all parts thereof shall be maintained in a safe and sanitary condition. All systems, devices or safeguards that were required by the code under which the building was constructed shall be maintained in conformance with the requirements of that code. The owner or the owner’s designated agent shall be responsible for the maintenance of buildings and structures. Fire protection systems or fire extinguishing systems shall be extended, altered or augmented as necessary to maintain and continue protection whenever any building so equipped is altered, remodeled or added to. Additions, repairs, alterations and servicing shall be in accordance with approved standards and shall be performed by NICET II Wichita Licensed Fire Protection Contractors. To determine compliance with this section, the building official may cause any structure to be reinspected.

## **SECTION 108 — ALTERNATE MATERIALS, ALTERNATE DESIGN AND METHODS OF CONSTRUCTION**

The provisions of this code are not intended to prevent the use of any material, alternate design or method of construction not specifically prescribed by this code, provided any alternate has been approved and its use authorized by the building official.

The building official may approve any such alternate, provided the building official finds that the proposed design is satisfactory and complies with the provisions of this code and that the material, method or work offered is, for the purpose intended, at least the equivalent of that prescribed in this code in suitability, strength, effectiveness, fire resistance, durability, safety and sanitation.

The building official shall require that sufficient evidence or proof be submitted to substantiate any claims that may be made regarding its use. The details of any action granting approval of an alternate shall be recorded and entered in the files of the code enforcement agency.

## **SECTION 109 — MODIFICATIONS**

When there are practical difficulties involved in carrying out the provisions of this code, the building official may accept compliance alternatives or grant modifications for individual cases. The building official shall first find that a special individual reason makes the strict letter of this code impractical and that the compliance alternative or modification is in conformance with the intent and purpose of this code and that such compliance alternative or modification does not lessen health, life and the intent of any fire–safety requirements or any degree of structural integrity. The details of any action granting modifications or the acceptance of a compliance alternative shall be recorded and entered in the files of the code enforcement agency.

## **SECTION 110 — TESTS**

Whenever there is insufficient evidence of compliance with any of the provisions of this code or evidence that any material or construction does not conform to the requirements of this code, the building official may require tests as proof of compliance to be made at no expense to this jurisdiction.

Test methods shall be as specified by this code, the Building Code or by other recognized test standards. If there are no recognized and accepted test methods for the proposed alternate, the building official shall determine test procedures.

All tests shall be made by an approved agency. Reports of such tests shall be retained by the building official for the period required for the retention of public records. All tests involving fire protection systems or fire extinguishing systems shall be performed by a NICET II Wichita Licensed Fire Protection Contractor. The Fire Department shall witness these tests.

## **Chapter 2**

### **ENFORCEMENT AND PERMITS**

#### **SECTION 201 — ADMINISTRATION**

The building official is hereby authorized to enforce the provisions of this code. The building official shall have the power to render interpretations of this code and to adopt and enforce rules and regulations supplemental to this code as deemed necessary in order to clarify the application of the provisions of this code. Such interpretations, rules and regulations shall be in conformity with the intent and purpose of this code.

#### **SECTION 202 — PERMITS REQUIRED**

Buildings or structures regulated by this code shall not be enlarged, altered, repaired, improved, moved, converted or demolished unless a separate permit for each building or structure has first been obtained from the building official in accordance with and in the manner prescribed in the applicable building codes of the jurisdiction

#### **SECTION 203 — INSPECTION OF WORK**

All buildings or structures within the scope of this code and all construction or work for which a permit is required shall be subject to inspection by the building official in accordance with and in the manner prescribed in this code and the Building Code.

#### **SECTION 204 — RIGHT OF ENTRY**

When it is necessary to make an inspection to enforce the provisions of this code, or when the building official has reasonable cause to believe that there exists in a building or upon a premises a condition that is contrary to or in violation of this code, which makes the building or premises unsafe, dangerous or hazardous, the building official may enter the building or premises at reasonable times to inspect or to perform the duties imposed by this code, provided that if such building or premises be occupied that credentials be presented to the occupant and entry requested. If such building or premises are unoccupied, the building official shall first make a reasonable effort to locate the owner or other person having charge or control of the building or premises and request entry. If entry is refused, the building official shall have recourse to the remedies provided by law to secure entry.

#### **SECTION 205 — LIABILITY**

The building official charged with the enforcement of this code, acting in good faith and without malice in the discharge of the duties required by this code or other pertinent law or ordinance shall not thereby be rendered personally liable for damages that may accrue to persons or property as a result of an act or by reason of an act or omission in the discharge of such duties. A suit brought against the building official or employee because of such act or omission performed by the building official or employee in the enforcement of any provision of such codes or other pertinent laws or ordinances implemented through the enforcement of this code or enforced by the code enforcement agency shall be defended by this jurisdiction until final termination of such proceedings, and any judgment resulting therefrom shall be assumed by this jurisdiction.

This code shall not be construed to relieve from or lessen the responsibility of any person owning, operating or controlling any building or structure for any damages to persons or property caused by defects, nor shall the code enforcement agency or its parent jurisdiction be held as assuming any such liability by reason of the inspections authorized by this code or any permits or certificates issued under this code.

#### **SECTION 206 — UNSAFE BUILDINGS OR STRUCTURES**

All buildings or structures regulated by this code that are structurally unsafe or not provided with adequate egress, or which constitute a fire hazard, or are otherwise dangerous to human life are, for the purpose of this section, unsafe.

Building service equipment regulated by codes adopted by the City of Wichita, which constitute a fire, electrical or health hazard, or unsanitary condition, or is otherwise dangerous to human life is, for the purpose of this section, unsafe. Any use of buildings, structures or building service equipment constituting a hazard to safety, health or public welfare by reason of inadequate maintenance, dilapidation, obsolescence, fire hazard, disaster, damage or abandonment is, for the purpose of this section, an unsafe use.

Parapet walls, cornices, spires, towers, tanks, statuary and other appendages or structural members that are supported by, attached to, or a part of a building and that are in deteriorated condition or otherwise unable to sustain the design loads that are specified in this code are hereby designated as unsafe building appendages.

## **WICHITA EXISTING BUILDINGS REHABILITATION AND CHANGE OF USE CODE**

All such unsafe buildings, structures or appendages and building service equipment are hereby declared to be public nuisances and shall be abated by repair, rehabilitation, demolition or removal in accordance with the procedures set forth in the Building Code and/or K.S.A. 12-1750 through 12-1756. As an alternative, the building official, or other employee or official of this jurisdiction, as designated by the governing body, may institute any other appropriate action to prevent, restrain, correct or abate the violation.

## Chapter 3

### DEFINITIONS

#### SECTION 301 — DEFINITIONS

For the purpose of this code, certain terms, phrases, words and their derivatives shall be construed as specified in this chapter. Words used in the singular include the plural and the plural the singular. Words used in the masculine gender include the feminine and the feminine the masculine. Any term not defined herein which is defined in any other code applicable to these provisions shall have the meaning as defined in that code. Where a term is defined in these provisions and is also defined in another code, then the term shall have the meaning as defined herein wherever it is used in these provisions. Words used in the present tense include the future.

Where terms are not defined, they shall have their ordinary accepted meanings within the context in which they are used. *Webster's Third New International Dictionary of the English Language, Unabridged*, copyright 1986, shall be considered as providing ordinarily accepted meanings.

**ACCESSIBILITY** is the design and construction of facilities governed by the Wichita Existing Buildings Code that make buildings accessible to persons with disabilities as defined by the Americans With Disabilities Act (ADA) and as outlined in Chapter 7 of this Code.

**ADDITION** is an extension or increase in floor area or height of a building or structure.

**ALTER or ALTERATION** is any construction or renovation to an existing structure other than repair or addition.

**APPROVED AGENCY** is an established and recognized agency regularly engaged in conducting tests or furnishing inspection services, when such agency has been approved by the building official.

**BUILDING CODE** is the currently adopted applicable code of this jurisdiction.

**BUILDING OFFICIAL** is the officer or other designated authority charged with the administration and enforcement of this code as applicable to buildings, or duly authorized representative.

**BUILDING SERVICE EQUIPMENT** refers to the plumbing, mechanical, electrical and elevator equipment, including piping, wiring, fixtures and other accessories that provide sanitation, lighting, heating, ventilation, cooling, refrigeration, fire fighting and transportation facilities essential for the habitable occupancy of the building or structure for its designated use and occupancy.

**COMPLIANCE ALTERNATIVE** is conformance with the intent of this code, using means, materials or design features that can be demonstrated to the satisfaction of the building official to perform in a manner equivalent to those specifically required by this code.

**DANGEROUS BUILDING** is any building or structure deemed to be dangerous under procedures outlined in Title 18.16 of the Code of the City of Wichita or K.S.A. Sections 12-1750 through 12-1756.

**DANGEROUS BUILDINGS CODE** is as defined in Title 18.16 of the Code of the City of Wichita or K.S.A. Sections 12-1750 through 12-1756.

**ELECTRICAL CODE** is Title 19 of the Code of the City of Wichita.

**ELEVATOR CODE** is the latest edition of the Safety Code for Elevators and Escalators (ASME A17.1) adopted by the City of Wichita.

**EQUIPMENT OR FIXTURE** is any plumbing, heating, electrical, ventilating, air conditioning, refrigerating and fire protection equipment, and elevators, dumb waiters, escalators, boilers, pressure vessels and other mechanical facilities or installations essential for the habitable occupancy of the building or structure for its designated use and occupancy.

Equipment or fixture shall not include manufacturing, production or process equipment, but shall include connections from building service to process equipment.

**EQUIVALENCY** is meeting the intent of this code by means other than those detailed in specific code provisions.

**EXISTING BUILDING** is a building or structure erected prior to the adoption of the current Building Code of the jurisdiction and has been issued a certificate of occupancy or has been legally occupied.

**FIRE CODE** is Title 15 of the Code of the City of Wichita.

**HISTORIC BUILDING** is a building or structure classified as historic by the federal, state or local government authority, or deemed potentially eligible for such classification.

**IMMINENT HAZARD** is a condition that could cause serious or life-threatening injury or death at any time.

**LOAD BEARING ELEMENT** is any column, girder, beam, joist, truss, rafter, wall, floor or roof sheathing which supports any vertical load in addition to its own weight, and/or any lateral load.

**MATERIALS AND METHODS REQUIREMENTS** are those requirements in the building, plumbing, electrical, mechanical and fire codes that specify material standards, details of installation and connection, joints, penetrations and continuity of any element,



component or system in the building. The required quantity, fire resistance, flame spread, acoustic or thermal performance, or other performance attribute is specifically excluded from materials and methods requirements.

**MECHANICAL CODE** is Title 22 of the Code of the City of Wichita.

**OCCUPANCY** is the purpose for which a building, or part thereof, is used or intended to be used.

**PLUMBING CODE** is Title 21 of the Code of the City of Wichita.

**REHABILITATE** is to return a building or structure to a state of utility through additions, alterations or repairs. As applied to historic structures, it includes the preservation of those portions or features that are of historical, architectural and cultural value.

**REPAIR** is the patching, restoration or minor replacement of materials, elements, components, equipment and fixtures for the purposes of maintaining such materials, elements, components, equipment and fixtures in good or sound condition.

**SUBSTANDARD BUILDING** is any building defined as substandard by Title 18.16 or Title 20.04 of the Code of the City of Wichita.

**TECHNICALLY INFEASIBLE** is a change to a building that has little likelihood of being accomplished because the existing structural conditions require the removal or alteration of a load-bearing member that is an essential part of the structural frame, or because other existing physical or site constraints prohibit modification or addition of elements, spaces or features which are in full and strict compliance with applicable requirements.

**UNSAFE CONDITION** is deemed to have been created if an addition or alteration will cause the existing building or structure to become structurally unsafe or overloaded, will not provide adequate egress in compliance with the provisions of this code, will obstruct existing exits, will create a fire hazard, will reduce required fire resistance, or will otherwise create conditions dangerous to human life.

**WORK AREA** is that portion of a building affected by any repair or alteration work as specified in the approved plans and permit. Work area excludes other portions of the building where incidental work entailed by the intended work must be performed, and portions of the building where work not initially intended by the owner is specifically required for an alteration, repair or reconstruction as per this code.

**Chapter 4**  
**ALTERATIONS AND REPAIRS TO EXISTING BUILDINGS**

**SECTION 401 — GENERAL**

**401.1 General.** Existing buildings or structures within the scope of this code shall meet the minimum standards set forth in this chapter, as well as any specific occupancy requirements set forth in this code. Buildings and structures undergoing a change of occupancy or a change in the character of their use shall also meet the requirements of Chapter 5. Historic buildings and structures shall meet the requirements of Chapter 6 and the provisions of this chapter where applicable. Buildings or structures shall meet the minimum level of performance specified in this chapter through compliance with the specific provisions of this code.

**401.2 Repairs.**

**401.2.1 General.** Except as is otherwise allowed herein, work shall be done using like materials or materials permitted by the applicable code for new construction. The work shall not make the building less conforming with the building, plumbing, mechanical, electrical or fire codes, or with any previously approved alternative arrangements, than it was before the repair was undertaken.

**401.2.2 Replacement glazing.** Replacement glazing in hazardous locations as defined the Building Code shall be approved safety glazing.

**EXCEPTIONS:**

1. Glass-block walls may be repaired using like materials.
2. Louvered windows and жалousies may be repaired using like materials.

**401.2.3 Water closets and plumbing fixtures.** When any water closet or other plumbing fixture is replaced, the replacement water closet or fixture shall comply with all applicable regulations governing water conservation.

**401.2.4 Structural Strength.** The work shall cause no diminution of structural strength.

**401.2.5 Hazardous Materials.** Materials no longer permitted, such as asbestos and lead-based paint, shall not be used.

**401.2.6 The following plumbing materials and supplies shall not be used:**

**401.2.6.1 General.**

1. All purpose solvent cement;
2. Flexible traps and tailpieces;
3. Sheet and tubular copper and brass trap and tailpiece fittings less than B&S 17 gage 0.045 inch (1.143 mm); and solder having more than 0.2 percent lead in the repair of potable water systems.

**401.2.6.2 Joints.**

1. Cement or concrete joints;
2. Mastic or hot-pour bituminous joints;
3. Joints made with fittings not approved for the specific installation under the Plumbing Code in effect at the time of installation;
4. Joints between different diameter pipes made with elastomeric O-rings;
5. Solvent-cemented joints between different types of plastic pipe;
6. Saddle type fittings.

**401.2.6.3 Traps.**

1. Traps that depend on moving parts to maintain the seal;
2. Bell traps;
3. Crown-vented traps;
4. Traps that are not integral with a fixture and that depend on interior partitions for the seal, except those traps constructed of approved material that is resistant to corrosion and degradation.

**401.2.7 Electrical.** Except for the following requirements existing electrical wiring and equipment undergoing repair shall be allowed to be repaired or replaced with like material.

**EXCEPTIONS:**

1. Replacement electrical products shall comply with applicable Electrical Code requirements;
2. Replacement of electrical receptacles shall comply with the applicable requirements of the Electrical Code.
3. Plug fuses of the Edison-base type shall be used for replacements only where there is no evidence of over fusing or tampering, per applicable requirements of the Electrical Code.
4. For replacement of non-grounding-type receptacles with grounding-type receptacles, and for branch circuits that do not have an equipment grounding conductor in the branch circuitry, the grounding conductor of a grounding-type receptacle outlet shall be permitted to be grounded to any accessible point on the grounding electrode system, or to any accessible point on the grounding electrode conductor, as allowed and described in applicable sections of the Electrical Code.
5. Non-"hospital grade" receptacles in patient bed locations of Use Group 1-2 shall be replaced with "hospital grade" receptacles, as required by the applicable requirements of the Electrical Code.
6. Frames of electric ranges, wall-mounted ovens, counter-mounted cooking units, clothes dryers, and outlet or junction boxes that are part of the existing branch circuit for these appliances shall be permitted to be grounded to the grounded circuit conductor if all the applicable conditions of the Electrical Code are met.

**401.3 Alterations.**

**401.3.1** When the alteration work in the work area includes no reconfiguration of spaces, all new work shall comply with the materials and methods requirements, as defined in Chapter 3.

**EXCEPTION:** Interior finishes shall comply with the requirements of 404.1.

**401.3.2** When the alteration work in the work area includes any of the following:

- the reconfiguration of spaces,
- the addition or elimination of any door or window,
- the reconfiguration or extension of any system, or
- the installation of any additional equipment,

all newly constructed elements, components and systems, including the installation of new elevators and boilers, shall comply with the requirements of the Building Code, Mechanical Code, Plumbing Code, Electrical Code, Elevator Code and other regulations applicable to new construction.

**EXCEPTIONS:**

1. Openable windows may be added without requiring compliance with the light and ventilation requirements of the building Code.
2. Newly installed electrical equipment shall comply with the requirements of Section 412.2 of this Code.

**401.3.3** When the alteration work in the work area includes any of the following:

- the reconfiguration of spaces in exits or corridors,
- the reconfiguration of any spaces in an entire occupancy within a building or in 50 percent of the area of the building the requirements of the section shall apply throughout the work area, and supplemental requirements shall apply as specified.

## SECTION 402 — HEIGHTS AND AREAS

**402.1 General.** The heights and areas of existing buildings or structures shall be acceptable, provided the requirements of this chapter are satisfied. Requirements for buildings and structures undergoing a change of occupancy shall be as provided in Chapter 5.

## SECTION 403 — LIFE SAFETY

**403.1 General.** Safety to life in existing buildings and structures shall meet the intent of the Building Code. The provisions of this section shall be deemed as meeting the intent of the Building Code for existing buildings, provided that none of the life-safety features required by the code under which the building was constructed will be reduced below the level established by that code or equivalent provisions of the currently adopted Building Code. When the alteration work in the work area includes any of the work specified in Section 401.3.3 then the requirements of this section shall apply throughout the work area, and supplemental requirements shall apply as specified.

**403.2 Means of Egress.** When the alteration work in the work area includes any of the work specified in Section 401.3.3 then the requirements of this Subsection shall apply throughout the work area, and supplemental requirements shall apply as specified. Means of egress systems complying with Sections 401.2.1 and 403.2.17 shall be deemed as meeting the intent of the Building Code for existing buildings, provided that an exit system evaluated under the provisions of this code is judged by the building official to be at least equivalent to the exit system that was required by the code under which the building was constructed or equivalent provisions of the currently adopted Building Code. Every required means of egress shall have access to a public way, directly or through yards, courts or similar spaces, and such access shall be permanently maintained clear of any obstruction that would impede egress.

### EXCEPTIONS:

1. Buildings in which the alteration is exclusively the result of compliance with the accessibility requirements of this code shall not be required to comply with this Section.
2. Existing dead end corridors may be extended and new dead end corridors may be added in accordance with Section 403.2.17.

### 403.2.1 Number of Exits.

**403.2.1.1** Every story utilized for human occupancy on which there is a work area shall be provided with the minimum number of exits required by the Building Code. Occupants of every floor above the first story and basements shall have access to at least two separate means of egress.

### EXCEPTIONS:

1. In all occupancies, second stories with an occupant load of 10 or less may have one means of egress.
2. Floors and basements used exclusively for service of the building may have one means of egress. For the purposes of this exception, storage rooms, laundry rooms, maintenance offices and similar uses shall not be considered as providing service to the building.
3. Basements within an individual dwelling unit having an occupant load of 10 or less may have one means of egress, provided every sleeping room on that floor is equipped with an approved window providing a clear opening of at least 5 square feet (0.4645 m<sup>2</sup>) in area with minimum net clear opening dimensions of at least 24 inches (609.6 mm) in height and at least 20 inches (508 mm) in width, and a sill height of not more than 44 inches (1118 mm) above the finished floor. An egress window well shall also be provided per the requirements of the Building Code.

4. Occupied roofs on Group R, Division 3 Occupancies may have one means of egress if such occupied areas are less than 500 square feet (46.45 m<sup>2</sup>) and located no higher than immediately above the second story.

5. When more than one exit is required, an existing or newly constructed fire escape, complying with the following limitations, shall be accepted subject to the approval of the building official, as providing one of the required means of egress. A fire escape shall not be substituted for a stairway that was required by the code under which the building was constructed. The fire escape shall not be the primary or the only means of egress.

5.1 All occupants shall have unobstructed access to the fire escape without having to pass through a room subject to locking. Access to the fire escape shall be marked by an exit sign.

5.2 Access to a fire escape shall be through a door when serving an occupant load of 10 or more. Such door shall be a minimum of 30" in width and 48" in height.

5.3 Access to a fire escape through a window shall be permitted from a single dwelling or guest rooms in Groups R-1, R-2 and I-1, or when serving spaces having an occupant load of 10 or less in other Occupancy Classifications. Such window shall comply with the requirements specified for emergency escape and rescue windows in the Building Code.

5.4 In all buildings of Group E, up to and including the 12th grade, buildings of Use Group I, rooming houses and child care centers, ladders of any type are prohibited on fire escapes used as a required means of egress.

5.5 Newly constructed fire escapes shall be permitted only where exterior stairs cannot be utilized due to lot lines limiting stair size or due to the sidewalks, alleys, or roads at grade level. New fire escapes shall not incorporate ladders or access by windows.

6. Except in buildings of Group H and I and in rooming houses and child care centers, a single exit is permitted in the story at the level of exit discharge when the occupant load of the story does not exceed 50 and the exit access travel distance does not exceed 75 feet (22.9 m).

7. In buildings of Use Group R-2 that are equipped throughout with an automatic fire sprinkler system, only one exit shall be required from basements or stories below grade, provided every sleeping room on that floor is equipped with an approved window providing a clear opening of at least 5 square feet (0.4645 m<sup>2</sup>) in area with minimum net clear opening dimensions of at least 24 inches (609.6 mm) in height and at least 20 inches (508 mm) in width, and a sill height of not more than 44 inches (1118 mm) above the finished floor. An egress window well shall also be provided per the requirements of the Building Code.

8. In buildings of Use Group R-2 that are not equipped throughout with an automatic fire sprinkler system, a single exit shall be permitted from a basement or story below grade if the number of dwelling units does not exceed four, and every sleeping room on that floor is equipped with an approved window providing a clear opening of at least 5 square feet (0.4645 m<sup>2</sup>) in area with minimum net clear opening dimensions of at least 24 inches (609.6 mm) in height and at least 20 inches (508 mm) in width, and a sill height of not more than 44 inches (1118 mm) above the finished floor. An egress window well shall also be provided per the requirements of the Building Code. The minimum fire resistance rating of the exit enclosure shall be one hour or equivalent.

9. In multilevel dwelling units in buildings of Use Groups R-1 or R-2, an exit shall not be required from each level of the dwelling unit provided that the following conditions are met:

9.1 The building in which such dwelling units are contained is of Type I or Type 2 construction and the travel distance within the dwelling unit does not exceed 75 feet (22 860 mm); or

9.2 The building in which such dwelling units are contained is not more than three stories in height and all third-floor space is part of one or more dwelling units located in part on the second floor and no habitable room within any such dwelling unit shall have a travel distance that exceeds 50 feet (15 240 mm) from the outside of the habitable room entrance door to the inside of the entrance door to the dwelling unit.

**403.2.1.2 Single exit buildings.** In buildings having only one exit, the single exit condition serving the work area shall be permitted to continue as follows, except as limited by the requirements of Section 403.2.17:

1. In buildings permitted to have a single exit in accordance with the Building Code.
2. In buildings of Use Group R-3.
3. In buildings of Use Groups R-1, R-2 and R-4 from floors that are not more than 16 feet (4877 mm) above exterior grade, except that in community residences for the developmentally disabled, the maximum occupant load, excluding staff, is 12.

4. In buildings of Use Groups R-1 and R-2, not more than two stories in height, from floors that are more than 16 feet (4877 mm) above exterior grade, when there are not more than four dwelling units per floor and the exit access travel distance does not exceed 50 feet (15 240 mm), except that in community residences for the developmentally disabled, the maximum occupant load, excluding staff, is 12. The minimum fire-resistance rating of the exit enclosure and of the opening protection shall be one hour.

5. Any building of Use Group R-2 of three stories or less shall be permitted to have a single exit provided the following conditions are met:

5.1 The stairway is separated from the rest of the building by construction having a minimum fire-resistance rating of one hour with self-closing one-hour fire doors protecting all openings between the stair enclosure and the building, and

5.2 The stairway does not serve more than one-half story below the level of exit discharge, and

5.3 All corridors serving as access to exits from the work area have a minimum fire-resistance rating of 20 minutes, and

5.4 There is not more than 35 feet (10.7 m) of travel distance from the entrance door of any living unit in the work area to an exit, and

5.5 Twenty-minute fire-resistance rated horizontal and vertical separation between living units in the work area is provided.

6. In buildings of Use Group R-2 not exceeding four stories, with not more than four living units per floor, with a smokeproof enclosure or outside stair as an exit, and with such exit within 20 feet (6096 mm) of travel to the entrance doors to all living units served thereby.

**403.2.1.3 Mezzanines.** Mezzanines in the work area and with an occupant load of more than 50 or in which the travel distance to an exit exceeds 75 feet (22 860 mm) shall have access to at least two independent means of egress.

**EXCEPTION:** Two independent means of egress are not required where the travel distance to an exit does not exceed 100 feet (30 480 mm) and the building is protected throughout with an automatic sprinkler system.

**403.2.2 Capacity of Means of Egress.** The capacity of the means of egress in each work area and throughout the egress path of each work area shall be sufficient for the occupant load thereof. Capacity shall be determined in accordance with the Building Code. The occupant load of a space shall be determined by whichever of the following methods provides the higher number:

1. Divide the floor area by the occupant load factor for this use group as provided in the Building Code.
2. The actual number of occupants for whom the work area is designed.

**EXCEPTION:** The Building Official shall be permitted to establish the occupant load as the number of persons for which existing means of egress is adequate, provided that measures are established to prevent occupancy by a greater number of persons.

#### **403.2.3 Stairways.**

**403.2.3.1** Existing winding or spiral stairways in any work area may serve as part of the means of egress from a building, including single exit buildings complying with 403.2.1.2, for a maximum occupant load of 10, provided that a complying handrail is located at the stair's outside perimeter. A winding or spiral stairway may not be the principal means of egress when used in conjunction with a fire escape as a second means of egress. Means of egress width shall comply with the Building Code. Circular stairways complying with the Building Code shall be acceptable as a means of egress.

**403.2.3.2** An alteration or the replacement of an existing stairway in an existing structure shall not be required to comply with the requirements of a new stairway as outlined in the Building Code where the existing space and construction will not allow a reduction in pitch or slope.

**403.2.3.3 Rise and run.** The largest tread run within any flight of stairs shall not exceed the smallest by more than 3/8 inch (9.5 mm). The greatest riser height within any flight of stairs shall not exceed the smallest by more than 3/8 inch (9.5 mm).

**403.2.4 Handrails.** The following requirements shall apply from the highest work area floor to the level of exit discharge.

**403.2.4.1** Every stairway that is part of the means of egress for any work area that has three or more risers and is not provided with at least one handrail, or in which the existing handrails are judged to be in danger of collapsing, shall be provided with handrails for the full length of the run of steps on at least one side. All stairways with an egress width of more than 66 inches (1676 mm) shall have handrails on both sides. Spiral and winding stairways shall have a handrail on the outside perimeter.

**403.2.4.2** Where there are no handrails or where the existing handrails must be replaced in accordance with Section 403.2.4.1, the handrails shall be designed and installed in accordance with the provisions of the Building Code.

**403.2.5 Guards.** All unenclosed floor and roof openings, open and glazed sides of stairways, landings and ramps, balconies or porches that are more than 30 inches (762 mm) above grade or the floor below, and roofs used for other than service of the building shall be protected by a guard. This section shall apply from the highest work area floor to the level of exit discharge, but shall be confined to the egress path of any work area.

**403.2.5.1** Existing guards, other than guards located on the open side of a stairway, which are at least 36 inches (914 mm) in height, shall be permitted to remain. Guards lower than 36 inches (914 mm) in height shall be augmented or corrected to raise their effective height to 36 inches (914 mm). Guards for stairways, exclusive of their landings, may have a height that is not less than 30 inches (762 mm) measured above the nosing of treads. When approved by the building official, the spacing between existing intermediate railings or openings in existing ornamental patterns may be accepted. See Chapter 6 for existing guards in historical structures.

**403.2.5.2** Where there are no guards or where the existing guards must be replaced in accordance with Section 403.2.5.1 the guards shall be designed and installed in accordance with the Building Code.

**403.2.6 Fire Escape Construction Requirements.** Fire escapes shall meet the following requirements. Fire escapes shall be subject to reinspection as required by the building official. The building official may require documentation to show compliance with the requirements of this section.

Fire escapes shall comply with the following:

1. All openings in an exterior wall below or within 10 feet (3048 mm), measured horizontally, of an existing fire escape serving a building over two stories in height shall be protected by a self-closing fire assembly having a three-fourths-hour fire-protection rating. When located within a recess or vestibule, adjacent enclosure walls shall not be less than one-hour fire-resistive construction.

2. Fire escape stairways and their balconies shall support their dead load plus a live load of not less than 100 pounds per square foot (4788 Pa) or a concentrated load of 300 pounds (1334 N) placed anywhere on the balcony or stairway to produce the maximum stress conditions. The stairway shall have a slope not to exceed 60 degrees (1 rad) from the horizontal and shall have a minimum width of 18 inches (457 mm). The stairway shall be provided with a top and intermediate railing on each side. Treads shall not be less than 4 inches (102 mm) in width and the rise between treads shall not exceed 10 inches (254 mm). All stairway and balcony railings shall support a horizontally applied force of not less than 50 pounds per lineal foot (218.9 N/m) of railing or a concentrated load of 200 pounds (890 N) placed anywhere on the railing to produce the maximum stress conditions.

3. Fire escape balconies shall not be less than 44 inches (1118 mm) in width with no floor opening greater than  $\frac{5}{8}$  inch (15.9 mm) in width except the stairway opening. Stairway openings in such balconies shall not be less than 22 inches by 44 inches (559 mm by 1118 mm). The guardrail of each balcony shall not be less than 36 inches (914 mm) high with not more than 9 inches (229 mm) between intermediate rails.

4. Fire escapes shall extend to the roof or provide an approved gooseneck ladder between the top floor landing and the roof when serving buildings four or more stories in height having roofs with a slope not exceeding 4 units vertical in 12 units horizontal (33.3 percent slope). Such ladders shall be designed and connected to the building to withstand a horizontal force of 100 pounds per lineal foot (1459 N/m); each rung shall support a concentrated load of 500 pounds (2224 N) placed anywhere on the rung to produce the maximum stress conditions. All ladders shall be at least 15 inches (381 mm) in clear width, be located within 12 inches (305 mm) of the building and shall be placed flatwise relative to the face of the building. Ladder rungs shall be  $\frac{3}{4}$  inch (19.1 mm) in diameter and shall be located 10 inches to 12 inches (254 mm to 305 mm) on center. Openings for roof access ladders through cornices and similar projections shall have minimum dimensions of 30 inches by 33 inches (762 mm by 838 mm).

5. The lowest balcony shall not be more than 18 feet (5486 mm) from the ground. Fire escapes shall extend to the ground or be provided with counterbalanced stairs reaching to the ground.

6. Fire escapes shall be kept clear and unobstructed at all times and maintained in good working order.

7. The fire escape shall have a clearance from electrical service conductors as required by the Electrical Code.

#### **403.2.7 Means of Egress Lighting.**

**403.2.7.1** Means of egress in all work areas shall be provided with artificial emergency lighting in accordance with the requirements of the Building Code.

**403.2.7.2 (Supplemental requirement)** Where the work area on any floor exceeds 50 percent of that floor area, means of egress throughout the floor shall be provided with emergency artificial lighting in accordance with the requirements of the Building Code.

**EXCEPTION:** Means of egress within a tenant space that is entirely outside the work area need not comply.

**403.2.7.3 (Supplemental requirement)** In a building with work areas involving over 50 percent of the aggregate floor area within the building, means of egress from the floor of the highest work area to the floor of exit discharge, and all intermediate floors, shall be provided with artificial emergency lighting within the exit enclosure in accordance with the requirements of the Building Code.

#### **403.2.8 Exit Signs.**

**403.2.8.1** Corridors and exits in all work areas shall be provided with exit signs in accordance with the requirements of the Building Code.

**403.2.8.2 (Supplemental requirement)** Where the work area on any floor exceeds 50 percent of that floor area, corridors and exits throughout the floor shall be provided with exit signs in accordance with the requirements of the Building Code.

**403.2.8.3 (Supplemental requirement)** In a building with work areas involving over 50 percent of the aggregate floor area within the building, means of egress from the floor of the highest work area to the floor of exit discharge shall be provided with exit signs in accordance with the requirements of the Building Code.

#### **403.2.9 Egress Doorways.**

**403.2.9.1** In any work area, all rooms and spaces having an occupant load greater than 50 or in which the travel distance exceeds 75 feet (22 860 mm) shall have a minimum of two egress doorways.

##### **EXCEPTIONS:**

1. Storage rooms having an occupant load of 10 or less.
2. Where the work area is served by a single exit in accordance with Section 403.2.8.

**403.2.9.2** In buildings of Use Group I-2, any patient sleeping room or suite of rooms greater than 1,000 square feet (92.9 m<sup>2</sup>) in the work area shall have a minimum of two egress doorways.

**403.2.10 Corridors.** Corridors in the work area serving as a part of the means of egress system shall be constructed as required by the Building Code. Existing walls and ceilings surfaced with wood lath and plaster or 1/2-inch-thick (12.7 mm) gypsum wallboard may be permitted in lieu of one-hour fire-resistive construction, provided the surfaces are in good condition.

#### **403.2.11 Corridor doors.**

**403.2.11.1** In any work area, door openings into corridors shall be protected by a tight-fitting smoke and draft-control assembly having a fire-protection rating of not less than 20 minutes when such opening protection was required by the code under which the building was constructed. Door-closing devices, door gaskets and other requirements imposed by the code under which the building was constructed shall be maintained. Corridor doors in the work area shall not be constructed of hollow core wood and shall not contain louvers.

When the building was constructed under a code that did not require 20-minute smoke and draft-control assemblies, doorway openings shall be protected by doors having a fire-protection rating of not less than 20 minutes or by a minimum 1<sup>3</sup>/<sub>8</sub>-inch-thick (34.9 mm) solid-bonded wood core door or an equivalent insulated steel door. In such case, the frames need not have a fire-resistive time period. Doors shall be maintained self-closing with self-latching hardware as required by the Building Code or shall be automatic closing by activation of a smoke detector.



**403.2.11.2** All dwelling units, guest room or rooming unit corridor doors in work areas in buildings of Use Groups R-1, R-2, and I-1 shall be at least  $1\frac{3}{8}$  inch solid core wood or approved equal with approved door closers and shall not have any glass panels, other than approved wired glass or other approved glazing material in metal frames.

**EXCEPTIONS:**

1. Corridor doors within a dwelling unit or guest room.
2. Existing doors meeting the requirements of HUD Guidelines on Fire Ratings of Archaic Materials and Assemblies for a rating of 15 minutes or better shall be accepted as meeting the provisions of this requirement.
3. Existing doors in buildings protected throughout with an approved automatic sprinkler system shall be required only to resist smoke; shall not contain louvers; and shall be reasonably tight fitting. With self closing devices and latches per the Building Code.
4. In group homes with a maximum of 15 occupants, and which are protected with an approved automatic detection system, closing devices may be omitted.

**403.2.11.3 Transoms.** In any work area, transoms and openings other than doors from corridors to rooms shall be protected as required by the Building Code. When the code under which the building was constructed permitted unprotected transoms or other unprotected openings, other than doors, such transoms or openings shall be covered with a minimum of  $\frac{3}{4}$ -inch-thick (19.1 mm) wood structural panel or  $\frac{1}{2}$ -inch-thick (12.7 mm) gypsum wallboard or equivalent material on the room side. Openings with fixed wired glass or other approved material set in steel frames or minimum  $\frac{1}{4}$ " aluminum frames are permitted in corridor walls. In all buildings of Use Group I-1, R-1 and R-2 all transoms in corridor walls of work areas shall be either glazed with  $\frac{1}{4}$ -inch wired glass set in metal frames or other glazing assemblies having a fire-protection rating as required for the door and permanently secured in the closed position or sealed with materials consistent with the corridor construction.

**EXCEPTION:** Existing corridor walls, ceilings and opening protection not in compliance with the above may be continued when the building is protected with an approved automatic sprinkler system throughout. Such sprinkler system may be supplied from the domestic water-supply system when approved by the Building Official provided the system is of adequate pressure, capacity and sizing for the combined domestic and sprinkler requirements.

**403.2.11.4 Other corridor openings.** In any work area, any other sash, grill or opening in a corridor, and any window in a corridor not opening to the outside air, shall be protected as required by the Building Code.

**403.2.11.5 (Supplemental requirements)** The requirements of Section 403.2.11 shall apply on the entire floor when the work area exceeds 50 percent of the floor area. Corridors within a tenant space that is entirely outside the work area need not comply with this requirement.

**403.2.12 Door swing.** In the work area and in the egress path from any work area to the exit discharge, all egress doors serving an occupant load greater than 50 shall swing in the direction of exit travel. Doors serving hazardous areas shall swing in the direction of exit travel.

**403.2.13** In any work area all doors opening onto an exit passageway at grade or exit stair shall be self-closing or automatic closing by listed closing devices.

**EXCEPTION:** Where exit enclosure is not required by the Building Code.

**403.2.14** In any work area, and in the egress path from any work area to the exit discharge, in a building or portions thereof of Use Group A with an occupant load greater than 50 all required exit doors equipped with latching devices shall be equipped with approved panic hardware.

**403.2.15 (Supplemental requirements)** The requirements of Sections 403.2.12 through 403.2.14 shall apply on the entire floor when the work area exceeds 50 percent of the floor area.

**EXCEPTION:** Means of egress within a tenant space that is entirely outside the work area need not comply.

**403.2.16** Work areas in buildings of Use Group I-3 having remote power unlocking capability for more than 10 locks shall be provided with an emergency power source for such locks. Power shall be arranged to automatically operate upon failure of normal power within 10 seconds and for a duration of not less than one hour.

**403.2.17 Dead End Corridors.** Existing dead end corridors in any work area shall not exceed 35 feet (10 668 mm). Newly constructed dead end corridors shall comply with the Building Code.

**EXCEPTIONS:**

1. Where dead end corridors of greater length are permitted by the Building Code.
2. In other than Use Groups A and H, the maximum length of an existing dead end corridor shall be 50 feet (15 240 mm) in buildings equipped throughout with an automatic fire alarm system installed in accordance with the Building Code.
3. In other than Use Groups A and H, the maximum length of an existing dead end corridor shall be 70 feet (21 336 mm) in buildings equipped throughout with an automatic sprinkler system installed in accordance with the Building Code.
4. In other than Use Groups A and H, the maximum length of a newly constructed or extended dead end corridor shall not exceed 50 feet (15 240 mm) in buildings equipped throughout with an automatic sprinkler system installed in accordance with the Building Code.

## **SECTION 404 — INTERIOR FINISH**

**404.1** When the alteration work in the work area includes no reconfiguration of spaces, the requirements of 404.1.1 and 404.1.2 shall apply in the work area.

**404.1.1** Wood paneling and textile wall coverings used as an interior finish shall comply with the flame spread requirements of the Building Code.

**404.1.2** Carpeting used as an interior floor finish material shall comply with the radiant flux requirements of the Building Code.

**404.2** When the alteration work in the work area includes any of the work specified in Section 401.3.3, then in addition to the requirements of 404.1.1 and 404.1.2, the requirements of 404.2.1 shall apply throughout the work area, and supplemental requirements shall apply as specified.

**404.2.1** The interior finish of walls and ceilings in any work area shall comply with the requirements of the Building Code. All existing interior finish materials which do not comply with the requirements of this section shall be removed or shall be treated with an approved fire-retardant coating in accordance with the manufacturer's instructions to secure compliance with the requirements of this section.

**404.2.2 (Supplemental requirements).**

**404.2.2.1** Where the work area on any floor exceeds 50 percent of that floor area, the requirements of Section 404.2.1 shall apply to the interior finish in exits and corridors serving the work area on the entire floor.

**EXCEPTION:** Interior finish within a tenant space that is entirely outside the work area need not comply.

**404.2.2.2** In a building with work areas involving over 50 percent of the aggregate floor area within the building, the requirements for interior finishes in exits shall apply from the floor of the highest work area to the floor of exit discharge, and to all intermediate floors.

## **SECTION 405 — SHAFT ENCLOSURES**

**405.1** In any work area, newly constructed vertical openings connecting two or more floors shall comply with the requirements of the Building Code.

**405.2** When the alteration work in the work area includes any of the work specified in Section 401.3.3, then the requirements of 405.2.1 shall apply throughout the work area, and supplemental requirements shall apply as specified.

**405.2.1** In any work area, all existing interior vertical openings connecting two or more floors shall be enclosed with approved assemblies having a fire-resistance rating of not less than one hour with approved opening protection.

**EXCEPTIONS:**

1. Where vertical opening enclosure is not required by the Building Code.
2. Interior vertical openings other than stairways may be blocked at the floor and ceiling of the work area by installation of not less than 2 inches (50.8 mm) of solid wood or equivalent construction.
3. In Use Groups A, B, M and R-2, a minimum 30-minute enclosure shall be provided to protect all vertical openings not exceeding three stories.
4. In Use Group A, the enclosure shall not be required:
  - 4.1 Where connecting the main floor and mezzanines; or
  - 4.2 Where all the following conditions are met:
    - 4.2.1 The communicating area has a low hazard occupancy, or has a moderate hazard occupancy, which is protected throughout by an automatic sprinkler system; and
    - 4.2.2 The lowest or next to the lowest level is a street floor; and
    - 4.2.3 The entire area is open and unobstructed in a manner such that it may be assumed that a fire in any part of the interconnected spaces will be readily obvious to all of the occupants; and
    - 4.2.4 Exit capacity is sufficient to provide egress simultaneously for all the occupants of all levels by considering all areas to be a single floor area for the determination of required exit capacity; and
    - 4.2.5 Each floor level, considered separately, has at least one-half of its individual required exit capacity provided by an exit or exits leading directly out of that level without having to traverse another communicating floor level or be exposed to the smoke or fire spreading from another communicating floor level.
5. In Use Group B, the enclosure shall not be required in a building not exceeding 3,000 square feet (278.7 m<sup>2</sup>) per floor or when the building is protected throughout by an approved automatic fire sprinkler system.
6. In Use Group E, the enclosure shall not be required for vertical openings not exceeding three stories when the building is protected throughout by an approved automatic fire sprinkler system.
7. In Use Group F, the enclosure shall not be required for vertical openings not exceeding three stories:
  - 7.1 In special purpose occupancies when necessary for manufacturing operations and direct access is provided to at least one protected stairway; or
  - 7.2 In buildings that are protected throughout by an approved automatic sprinkler system.
8. In Use Group H, the enclosure shall not be required for vertical openings not exceeding three stories when necessary for manufacturing operations and every floor level has direct access to at least two remote enclosed stairways or other approved exits.
9. In Use Group M, the enclosure shall not be required when:
  - 9.1 Openings connect only two floor levels, such as between the street floor and mezzanine or second floor; or
  - 9.2 Occupancies are protected throughout by an approved automatic sprinkler system.
10. In Use Group R-1, the enclosure shall not be required for vertical openings not exceeding three stories:
  - 10.1 In buildings that are protected throughout by an approved automatic sprinkler system; or
  - 10.2 In buildings with less than 25 guests in which the following conditions are met:
    - 10.2.1 Every sleeping room is provided with an approved window having a sill height not greater than 44 inches (1118 mm);
    - 10.2.2 Every sleeping room above the second floor is provided with direct access to a fire escape or other approved second exit;
    - 10.2.3 Any exit access corridor exceeding eight feet in length which serves two means of egress, at least one of which is an unprotected vertical opening, shall be separated from the vertical opening by a one-hour fire barrier; and
    - 10.2.4 The building is protected throughout by an automatic fire alarm system, installed and supervised in accordance with the Building Code.

11. In Use Group R-2, the enclosure shall not be required:

11.1 In buildings which are protected throughout by an approved automatic sprinkler system;

11.2 Where the vertical opening connects not more than two floor levels with not more than four dwelling units per floor and each dwelling unit has access to a fire escape or other approved second exit; or

11.3 In buildings with not more than four dwelling units per floor, and in which the following conditions are met:

11.3.1 Every sleeping room is provided with an approved window having a sill height not greater than 44 inches (1118 mm); and

11.3.2 Every dwelling unit or sleeping room above the second floor is provided with direct access to a fire escape or other approved second exit; and

11.3.3 The building is protected throughout by an automatic fire alarm system, installed and supervised in accordance with the Building Code.

#### **405.2.2 (Supplemental requirements).**

**405.2.2.1** Where the work area on any floor exceeds 50 percent of that floor area, Section 405.2.1 shall apply throughout the floor.

**405.2.2.2** Where the work area on any floor exceeds 50 percent of that floor area, stairways that are part of the means of egress serving the work area shall be enclosed with smoke-tight enclosures on all floors below the highest work area floor.

**EXCEPTION:** Where stairway enclosure is not required by the Building Code.

**405.2.2.3** In a building with work areas involving over 50 percent of the aggregate floor area within the building, stairways that are part of the means of egress shall be enclosed in accordance with Section 405.2.1 on the highest work area floor and on all floors below it.

## **SECTION 406 — FIRE SEPARATION AND SMOKE BARRIERS**

**406.1** When the alteration work in the work area includes any of the work specified in Section 401.3.3, then the requirements of 406.2 and 406.3 shall apply as specified.

### **406.2 Use Group I-2.**

**406.2.1** Where the work area is on a story used for sleeping purposes for more than 30 patients, the story shall be divided into not less than two compartments by smoke barrier walls complying with the technical requirements of Section 406.1.2, such that each compartment does not exceed 22,500 square feet (2090.2m<sup>2</sup>) and the travel distance from any point to reach a door in the required smoke barrier shall not exceed 250 feet (60 960 mm).

**EXCEPTION:** Where neither the length nor width of the smoke compartment exceeds 150 feet, (45 790 mm) the travel distance to reach the smoke barrier door shall not be limited.

**406.2.2** The smoke barriers specified in Section 406.2.1 shall be constructed in accordance with the following provisions:

1. Smoke barriers shall have a fire-resistance rating of not less than  $\frac{5}{8}$  inch thick Type X gypsum wallboard or other one-half hour assembly and shall form an effective membrane continuous from outside wall to outside wall and from floor slab to floor or roof deck above, including continuity through all concealed spaces, such as those found above suspended ceilings, and including interstitial structural and mechanical spaces. Transfer grilles, whether equipped with fusible link-operated dampers or not, shall not be used in these partitions.

2. Smoke barriers are not required in interstitial spaces when such spaces are designed and constructed with ceilings that provide resistance to the passage of fire and smoke equivalent to that provided by smoke barriers.

3. Doors in smoke barriers shall have a fire-protection rating of not less than 20 minutes when tested in accordance with ASTM E152 without the hose stream and labeled by an approved agency, or shall be  $1\frac{3}{4}$ -inch solid bonded wood core doors. Newly installed double egress corridor doors shall have approved vision panels in accordance with the Building Code. The doors shall close the openings with only the clearance necessary for proper operation under self-closing or automatic closing and shall be without undercuts, louvers or grilles. Rabbits or astragals are required at the meeting edges of newly installed

double egress doors, and stops are required on the head and jambs of all doors in smoke barriers. Positive latching devices are not required on double egress corridor doors, and center mullions are prohibited.

4. Protection at the meeting edges of doors and stops at the head and sides of door frames shall not be required in buildings equipped with an approved engineered smoke control system. The engineered smoke control system shall respond automatically, preventing the transfer of smoke across the barrier.

5. Doors in smoke barriers shall be self-closing or shall be provided with approved door hold-open devices of the fail-safe type, which shall release the doors causing them to close upon the actuation of smoke detectors as well as upon the application of a maximum manual pull of 50 pounds (22.7 kg) against the hold-open device.

6. An approved damper designed to resist the passage of smoke shall be provided at each point a duct penetrates a smoke barrier. The damper shall close upon detection of smoke by an approved smoke detector located within the duct.

7. In lieu of an approved smoke detector located within the duct, ducts which penetrate smoke barriers above doors are permitted to have the approved damper arranged to close upon detection of smoke on either side of the smoke barrier door opening.

8. Dampers are not required in the following situations:

8.1 Where not required by the Building Code.

8.2 In buildings equipped with an approved engineered smoke control system.

8.3 Where the openings in ducts are limited to a single smoke compartment and the ducts are of steel construction.

8.4 In fully ducted systems where both sides of the smoke barrier are protected with an automatic sprinkler system.

### **406.3 Use Group R-3.**

**406.3.1** Where the work area is in any attached dwelling unit in Use Group R-3, walls separating the dwelling units which are not continuous from the foundation to the underside of the roof sheathing shall be constructed to provide a continuous fire separation using construction materials consistent with the existing wall or complying with the requirements for new structures. All work shall be performed on the side of the wall of the dwelling unit that is part of the work area.

**EXCEPTION:** Walls are not required to be continuous through concealed floor spaces.

## **SECTION 407 — FIRE SUPPRESSION SYSTEMS**

**407.1** When the alteration work in the work area includes any of the work specified in Section 401.3.3, then the requirements of this Section shall apply throughout the work area, and supplemental requirements shall apply as specified.

**407.2** All work areas in any building or portion thereof that is required to have a fire-extinguishing system in accordance with the Building Code shall be provided with an automatic fire-suppression system.

**EXCEPTION:** In other than high-rise structures, where an automatic water supply for sprinkler protection is not available at that floor level, the building official shall be permitted to accept alternative protection.

### **407.3 (Supplemental requirements).**

**407.3.1** Where the work area on any floor exceeds 50 percent of that floor area, Section 407.2 shall apply to the entire floor.

**EXCEPTION:** In other than high-rise structures, where an automatic water supply for sprinkler protection is not available at that floor level, the building official shall be permitted to accept alternative protection.

**407.3.2** In a building with work areas involving over 50 percent of the aggregate building area, Section 407.2 shall apply to the highest floor containing a work area and all floors below.

**407.4 Mixed Use.** In buildings containing mixed uses, one or more of which requires automatic suppression in accordance with Sections 407.2 or 407.3, suppression will not be required throughout the building, provided that the uses requiring suppression are separated from those not requiring suppression by fire-resistive construction having a minimum two-hour rating for Use Group H, and a minimum one-hour rating for all use groups other than Use Group H.

**407.5 Supervision.** Fire suppression systems required by this Section shall be supervised by one of the following methods:

1. Approved central station system in accordance with NFPA 72;
2. Approved proprietary system in accordance with NFPA 72;
3. Approved remote station system of the jurisdiction in accordance with NFPA 72; or
4. Approved local alarm service which will cause the sounding of an alarm in accordance with NFPA 72.

**EXCEPTIONS:**

1. Underground gate valve with roadway boxes;
2. Halogenated extinguishing systems;
3. Carbon dioxide extinguishing systems;
4. Dry and wet chemical extinguishing systems;
5. Limited area sprinkler systems; and
6. Occupancies in Use Group R complying with NFPA 13R or NFPA 13D, as appropriate.

**407.6 Standpipes.** Any work areas in a building that is required to be provided with a standpipe system by the Building Code shall be provided with standpipes up to and including the highest work area floor. The standpipes shall be located and installed in accordance with the Building Code.

**EXCEPTIONS:**

1. No pump shall be required provided that the standpipes are capable of accepting delivery by fire department apparatus of a minimum of 250 gallons per minute at 65 psi to the topmost floor in buildings equipped throughout with an automatic sprinkler system or a minimum of 500 gallons per minute at 65 psi (448.2 kPa) to the topmost floor in all other buildings. Where the standpipe terminates below the topmost floor, the standpipe shall be designed to meet these requirements (gallons per minute/psi) for possible future extension of the standpipe.
2. In other than high-rise buildings, the interconnection of multiple standpipe risers shall not be required.

## SECTION 408 — FIRE ALARMS

**408.1** When the alteration work in the work area includes any of the work specified in Section 401.3.3, then the requirements of this Section shall apply throughout the work area, and supplemental requirements shall apply as specified.

**EXCEPTION:** The fire alarm system shall generate an evacuation signal throughout the facility meeting the requirements of the *American Standard Evacuation Signal* or *The Emergency Voice Evacuation Signal* throughout the facility as specified by NFPA Standard 72.

### **408.2 Smoke Detectors.**

**408.2.1** In Use Groups R-1 and R-2, individual guestrooms and individual dwelling units in any work area shall be provided with smoke detectors complying with the Building Code.

**408.2.2** Where the work area is in Use Groups R-3 or R-4, smoke detectors complying with the Building Code shall be provided at each level and outside each sleeping area.

**EXCEPTIONS:**

1. Interconnection of smoke detectors shall not be required.
2. Battery-powered single station smoke detectors listed in accordance with UL 217 shall be permitted outside the work area.

### **408.3 Manual Fire Alarm Systems.**

**408.3.1** Where the work area on any floor exceeds 50 percent of that floor area and the work area is in a building that is required to have a manual fire alarm system in accordance with the Building Code, a manual fire alarm system shall be provided on the floor. Alarm-indicating appliances shall be provided on the floor and shall be automatically activated as required by the Building Code for all new and existing initiating devices.

**408.3.2** Where the work area involves over 50 percent of the aggregate building area and the work area is in a building that is required to have a manual fire alarm system in accordance with the Building Code, a manual fire alarm system shall be provided throughout the building in accordance with the Building Code.

### **408.4 Automatic Fire Detection Systems.**

**408.4.1** Where the work area is in a building that is required to have an automatic fire detection system in accordance with the Building Code, an automatic fire detection system shall be installed in the work area. Existing alarm-indicating appliances shall be automatically activated throughout the building. Where the building is not equipped with a fire alarm system, alarm-indicating appliances within the work area shall be provided and automatically activated.

**EXCEPTION:** Where selective notification is permitted, alarm-indicating appliances shall be automatically activated in the areas selected.

**408.4.2** Where the work area on any floor exceeds 50 percent of that floor area and the work area is in a building that is required to have an automatic fire detection system in accordance with the Building Code, an automatic fire detection system shall be installed throughout the floor. Alarm-indicating appliances shall be automatically activated throughout the building.

#### **EXCEPTIONS:**

1. Where selective notification is permitted, alarm-indicating appliances shall be automatically activated in the areas selected.
2. Where the building is not equipped with a fire alarm system, alarm indicating appliances on the floor shall be provided and automatically activated.

**408.4.3** Where the work area involves over 50 percent of the aggregate building area and the building is required to have an automatic fire detection system in accordance with the Building Code, an automatic fire detection system shall be provided throughout the building in accordance with the Building Code.

## **SECTION 409 — HIGH-RISE BUILDINGS**

**409.1** Any building or structure having one or more floors more than 75 feet (22 860 mm) above the lowest level accessible to a fire department vehicle shall comply with the requirements of this section when the alteration work in the work area includes any of the work specified in Section 401.3.3.

**409.2 Recirculating Air or Exhaust Systems.** When the work area is on a floor that is served by a recirculating air or exhaust system serving more than one floor, the recirculating air or exhaust system that serves the work area shall be equipped with approved smoke and heat detection devices installed in accordance with the Mechanical Code. The devices shall stop the fan(s) automatically and shall be of the manual reset type. Automatic fan shutdown is not required when the system is part of an approved smoke removal or smoke control system.

**409.4 Smoke Barriers.** Where the work area on any floor exceeds 50 percent of that floor area and is on a floor that is above the main floor level in Use Groups R-1 and R-2, smoke barriers conforming to the requirements of Section 406.1.2 shall be provided around all elevator landings on the work area floor.

#### **EXCEPTIONS:**

1. The smoke barriers shall be permitted to terminate at the ceiling, provided the ceiling membrane provides resistance to the passage of smoke equivalent to that provided by the smoke barriers.
3. The smoke barriers shall not be required in buildings protected throughout by an automatic sprinkler system.

## SECTION 410 — BOILER/FURNACE EQUIPMENT ROOMS

**410.1** When the alteration work in the work area includes any of the work specified in Section 401.3.3, then the requirements of this Section shall apply as specified.

**410.2** Boiler/furnace equipment rooms shall be enclosed by one-hour fire rated construction when the work area is in any of the following facilities: day nurseries, children's shelter facilities, residential child care facilities and similar facilities with children below the age of 2-1/2 years, and which may be classified as Use Group I-2, shelter facilities, residences for the developmentally disabled, group homes, teaching family homes, transitional living homes, rooming and boarding houses, hotels, and multiple dwellings.

**EXCEPTIONS:**

1. Furnace and boiler equipment of low pressure type (operating at pressures of 15 psig or less for steam equipment or 160 psig or less for hot water equipment), when installed in accordance with manufacturer recommendations or furnace and boiler equipment of residential (R-3) type [200,000 BTU (211 011 J) per hour input rating or less] is not required to be enclosed.
2. Furnace rooms protected with automatic sprinkler protection.

**410.3** Emergency controls shall be provided in all structures classified as day nurseries, children's shelter facilities, residential child care facilities and similar facilities with children below the age of 2<sup>1</sup>/<sub>2</sub> years, and which may be classified as Use Group 1-2, and in group homes, teaching family homes, and supervised transitional living homes in accordance with the following:

1. Emergency shutoff switches for furnaces and boilers in basements must be at the top of the stairs leading to the basement; and;
2. Emergency shutoff switches for furnaces and boilers in other enclosed rooms must be located outside of the room.

**EXCEPTION:** Where the only entrance to an equipment room containing a boiler is located on an exterior wall or in a public area, the emergency shut off switch may be located inside the equipment room near the exiting door.

## SECTION 411 — STRUCTURAL REQUIREMENTS

**411.1** The requirements of this Section shall apply in any alteration work area.

**411.2** The minimum design loads for the structure shall be the loads applicable at the time the building was constructed, provided that no dangerous condition is created. Structural elements which are uncovered during the course of the modification and which are found to be unsound or dangerous, shall comply with applicable requirements of the Building Code.

Wood framing is permitted to use the design stresses specified in the building code under which the building was constructed or other stress criteria approved by the Building Official.



## SECTION 412 — OTHER SAFETY FEATURES

**412.1 Electrical.** The electrical service, branch circuits, switches, receptacles, fixtures and all other electrical wiring in every building or structure shall be in good repair. Broken, loose, frayed, inoperative, defective or missing devices shall be repaired or replaced. All unsafe conditions shall be corrected.

### **412.1.1** Conductor requirements.

#### **A. Commercial and Industrial.**

1. Type. All commercial and industrial wiring conductors rated two hundred amperes or less, including all service conductors required to be installed by the licensed electrical contractor, shall be copper.

**EXCEPTION:** Feeder circuit and branch circuit conductors rated one hundred amperes or more, may be aluminum or copper-clad aluminum, provided panelboards or disconnect switches served by such circuits are marked by the manufacturer as being suitable for aluminum or copper-clad aluminum termination.

2. Minimum Size. The minimum size conductors shall be No. 12 AWG copper, except smaller sizes will be acceptable for control wiring.

**B. Residential.** All residential and accessory building wiring conductors used for lighting and general purpose branch circuits rated twenty amperes or less shall be copper.

**412.1.2** Type NM and NMC cable (Romex) shall be permitted to be used in one and two-family dwellings and multifamily dwellings. It cannot be installed in commercial or industrial buildings or structures.

### **412.2 Electrical Equipment and Wiring.**

**413.2.1** The requirements of this subsection apply in any alteration work area.

**412.2.2** All newly-installed electrical equipment and wiring relating to work done in any work area shall comply with the materials and methods requirements of the Electrical Code. Other existing wiring does not have to be changed if it met the Electrical Code in effect at the time of installation and has been maintained in a safe manner.

**EXCEPTION:** Electrical equipment and wiring in newly installed partitions and ceilings shall comply with all applicable requirements of the Electrical Code.

**412.2.3** Existing wiring in all work areas in Use Groups A-1, A-2, A-5, H and I shall be upgraded to meet the materials and methods requirements of the Electrical Code.

**412.2.4** Service equipment and/or feeders in Use Groups R-2, R-3 and R-4. Service to existing dwelling units in any work area shall be a minimum of 100 ampere, three-wire capacity, and service equipment shall be dead front, having no live parts exposed whereby accidental contact could be made. Type "S" fuses shall be installed when fused equipment is used.

**EXCEPTION:** Existing service equipment of 60 ampere three-wire capacity, and feeders of 30 ampere or larger, two- or three-wire capacity, shall be accepted if adequate for the electrical load being served.

**412.2.5** In Use Groups R-2, R-3 and R-4, when the work area includes any of the following areas within a dwelling unit, the following requirements shall apply:

**412.2.5.1** All enclosed areas, other than closets, kitchens, basements, garages, hallways, laundry areas and bathrooms, shall have a minimum of three duplex receptacle outlets or two duplex receptacle outlets and one ceiling or wall type lighting outlet.

**412.2.5.2** Kitchen areas shall have a minimum of two duplex receptacle outlets and a switch-controlled lighting outlet.

**412.2.5.3** Laundry areas shall have a minimum of one duplex receptacle outlet located near the laundry equipment and installed on an independent circuit.

**412.2.5.4** Ground fault circuit protection shall be provided on newly installed 125 volt, 15 and 20 ampere receptacle outlets as required by the Electrical Code.

**412.2.5.5** At least one switch-controlled lighting outlet shall be provided in every bathroom, hallway, stairway, attached garage and detached garage with electric power, and to illuminate outdoor entrances.

**412.2.5.6** At least one switch-controlled lighting outlet shall be provided in utility rooms and basements where these spaces are used for storage or contain equipment requiring service.

**412.2.5.7** Clearance for electrical service equipment shall be provided in accordance with the Electrical Code.

**412.3 Plumbing.** Leaking drain or supply lines shall be repaired or replaced. All unsafe conditions shall be corrected. Any cross–connections or siphonage between fixtures shall be corrected.

When the alteration work in the work area includes any of the work specified in Section 401.3.2, and the work area is more than 50 percent of the gross floor area as defined in Section 1002 of the Building Code, and the occupant load will be increased by at least 20 percent as a result of the alteration, plumbing fixtures shall be provided based on the increased occupant load in the work area in quantities and locations specified in the Plumbing Code based on the increased occupant load.

**412.4 Mechanical.** Mechanical systems shall have any unsafe conditions corrected. The requirements of this subsection shall apply when the alteration work in the work area includes any of the work specified in Section 401.3.2.

**412.4.1** All altered spaces intended for occupancy and all spaces converted to habitable or occupiable space in any work area shall be provided with either natural or mechanical ventilation.

**412.4.1.1** Natural ventilation shall comply with the requirements of the Building Code.

**412.4.1.2** Newly–installed mechanical ventilation systems shall comply with the requirements of the Mechanical Code.

**EXCEPTION:** Existing mechanical ventilation systems shall comply with the requirements of Section 510.1.

**412.4.1.3** In mechanically ventilated spaces, existing mechanical ventilation systems that are altered, reconfigured or extended shall provide not less than 5 cubic feet per minute (cfm) per person of outdoor air and not less than 15 cfm of ventilation air per person; or not less than the amount of ventilation air determined by the Indoor Air Quality Procedure of ASHRAE 62–89.

**412.4.1.4** All newly introduced devices, equipment or operations that produce airborne particulate matter, odors, fumes, vapor, combustion products, gaseous contaminants, pathogenic and allergenic organisms, and microbial contaminants in such quantities as to adversely affect or impair health, or cause discomfort to occupants, shall be provided with local exhaust terminating to the exterior of the building.

## SECTION 413—INTERIOR SPACE DIMENSIONS

**413.1** In Groups R-1 and R-2, when habitable spaces as defined in Chapter 2 of the Building Code are created in previously unoccupied space, other than a kitchen, they shall not be less than 7 feet in any plan dimension.

**413.2** In Groups R-1 and R-2, when habitable spaces as defined in Chapter 2 of the Building Code are created in previously unoccupied space, they shall have a ceiling height of not less than 7 feet.

### EXCEPTIONS:

1. Beams, girders, ducts or pipes spaced not less than 4 feet on center and projecting not more than 6 inches below the required ceiling height.
2. For rooms with a sloped ceiling, the prescribed ceiling height is required for at least 35 square feet of the floor area of the room. Any portion of the room measuring less than 5 feet from the finished floor to the finished ceiling shall not be considered usable floor area and shall not be included in any computation of the minimum area thereof.

**413.3** In Group R-2, when habitable spaces as defined in Chapter 2 of the Building Code are created in previously unoccupied space, other than a kitchen, they shall have a net floor area of not less than 70 square feet.

## **SECTION 414—COMMERCIAL KITCHENS**

**414.1** Where the alteration work area includes a commercial kitchen and the modification includes reconfiguration or extension of cooking equipment, or the installation of additional cooking equipment, existing grease ducts, exhaust equipment, kitchen hoods and suppression systems shall be brought into compliance with all the requirements in the Mechanical Code and Fire Code.

## **SECTION 415 – ACCESSIBILITY**

When alteration work defined in 401.3.2 and 401.3.3 is performed, the work shall comply with Chapter 7 of this Code.

## Chapter 5

### MINIMUM PROVISIONS FOR CHANGE OF USE AND OCCUPANCY

#### SECTION 501 — GENERAL

**501.1 Change of Use and Occupancy.** The occupancy classification of existing buildings and structures may be changed, provided the building or structure meets the requirements of this chapter and the requirements of Chapter 4 applied throughout the building for the new occupancy classification. Where no specific requirements are included herein, the building or structure shall comply with the Building Code.

Every change of occupancy classification shall require a new certificate of occupancy regardless of whether any alterations to the building are required by this code.

**EXCEPTIONS:**

1. Any repairs and alterations work undertaken in connection with a change of character of use that does not involve a change of occupancy classification shall conform to the requirements of Chapters 4 and 5, respectively, for the applicable occupancy classification, and with 501.2, and Sections 508 through 510, if applicable.
2. Compliance with all the provisions of Chapter 4 is not required where the change of use complies with the requirements of Section 501.6.
3. As modified in Section 604 for historic buildings.
4. Existing stairways shall not be required to comply with the requirements for a new stairway where the existing space and construction will not allow a reduction in pitch or slope.

#### **501.2 Special Use and Occupancy.**

**501.2.1** Where the character of use of an existing building or part of an existing building is changed to one of the following special use or occupancy categories as defined in Chapter 4 of the Building Code, the building shall comply with all of the applicable requirements of that chapter, regardless of whether a change of occupancy classification is involved:

1. Covered mall buildings,
2. Atriums,
3. Private garages,
4. Public garages,
5. Motion picture projection rooms, screening rooms and sound stages,
6. Stages and platforms,
7. Special amusement buildings, and
8. HPM facilities.

**501.2.2** An underground building, as defined in Section 405 of the Building Code, in which there is a change of use shall comply with the requirements of the Building Code applicable to underground structures.

#### **501.3 Partial Change of Occupancy Classification.**

**501.3.1** Where a portion of an existing building is changed to a new occupancy classification and that portion is not separated from the remainder of the building with fire separation assemblies having a fire-resistance rating as required in the Building Code for the separate occupancy classifications, or with approved compliance alternatives, the entire building shall comply with all the requirements of Chapter 4 applied throughout the building for the new occupancy classification, and with the requirements of this chapter.

**EXCEPTION:** Compliance with all the provisions of Chapter 4 is not required when the change of use complies with the requirements of Section 501.6.

**501.3.2** Where a portion of an existing building is changed to a new occupancy classification and that portion is separated from the remainder of the building with fire separation assemblies having a fire-resistance rating as required in the Building Code for the separate occupancy classifications, or with approved compliance alternatives, the portion changed shall comply with all the requirements of Chapter 4 for the new occupancy classification, and with the requirements of this Chapter.

**EXCEPTION:** Compliance with all the provisions of Chapter 4 is not required when the change of use complies with the requirements of Section 501.6.

**501.4 Accessibility.** Every building undergoing a change of occupancy shall comply with the accessibility requirements in this Code and Appendix A to this Code.

**501.5 Hazard Category Classifications.** The relative degree of hazard between different occupancy classifications shall be as set forth in the hazard category classifications, Tables 5–A through 5–E.

**501.5.1** An existing building or portion thereof may have its use changed to an occupancy classification within the same hazard classification category or to an occupancy classification in a lower hazard classification category (higher number) in all five hazard category classifications, provided it complies with the provisions of Chapter 4 for the new occupancy classification, applied throughout the building or portion thereof in accordance with Section 501.3.2, with Sections 505.1 (Live Loads) and 505.2 (Vertical Loads on Roofs), and with Sections 506 (Handrails and Guards) and 507 (Health and Hygiene).

**EXCEPTION:** Compliance with all the provisions of Chapter 4 is not required where the change of use complies with the requirements of Section 501.6.

**501.5.2** An existing building shall comply with all the applicable requirements of this chapter when a change in use will place it in a higher hazard category or when its use is changed within Group H.

**501.5.3** An existing building may have its use changed to a higher hazard rating (lower number) in all four hazard category classifications designated in Tables A, B, C and D, provided it complies with this chapter.

**501.6 Change of Use to an Equal or Lower Hazard.** A change of use to an occupancy classification within the same hazard classification category or to an occupancy classification in a lower hazard classification category (higher number) in the three hazard category classifications addressed by Tables A, B and C shall be permitted in an existing building or portion thereof, provided the provisions of this section are met.

**501.6.1** Regardless of the occupancy classification, the following requirements shall be met:

1. The capacity of the means of egress shall comply with the requirements of Section 403.2.2.
2. The interior finish of walls and ceilings shall comply with the requirements of Section 404.
3. The high rise building requirements of Section 409 shall apply.
4. The boiler/furnace room requirements of Section 410 shall apply.

**501.6.2** When the new use is classified as Group I–1, R–1, R–2, or R–4, the following requirements shall be met throughout the building:

1. Corridor doors and transoms shall comply with the requirements of Sections 403.2.11 and 403.2.11.3, respectively.
2. Fire suppression systems shall comply with the requirements of Section 407.
3. Fire alarm systems shall comply with the requirements of Section 408.

**501.6.3** When the new use is classified as Group I–2, the following requirements shall be met throughout the building:

1. Egress doorways from patient sleeping rooms and suites of rooms shall comply with the requirements of Section 403.2.1.
2. Shaft enclosures shall comply with the requirements of Section 405.
3. Smoke barriers shall comply with the requirements of Section 406.1.
4. Fire suppression systems shall comply with the requirements of Section 407.
5. Fire alarm systems shall comply with the requirements of Section 408.

**501.6.4** When the new use is classified as Group I-3, the following requirements shall be met throughout the building:

1. Locking of egress doors shall comply with the requirements of Section 403.2.16.
2. Shaft enclosures shall comply with the requirements of Section 405.
3. Fire-suppression systems shall comply with the requirements of Section 407.
4. Fire alarm systems shall comply with the requirements of Section 408.

**501.6.5** When the new use is classified as Group R-3, the following requirements shall be met:

1. Dwelling unit separation shall comply with the requirements of Section 406.2.
2. The smoke detector requirements of Section 408.1 shall be met.

**501.6.6** When a change of occupancy includes a commercial kitchen, existing grease ducts, exhaust equipment and kitchen hoods shall be brought into compliance with all the requirements of the mechanical code.

## SECTION 502 — FIRE AND LIFE SAFETY

### 502.1 Heights and Areas.

**502.1.1** Where a change of use is made to a higher hazard category as shown in Table A, heights and areas of buildings and structures shall meet the limitations of Chapter 5 of the Building Code for the new occupancy classification.

**502.1.2** When a change of use is made to an equal or lesser hazard category as shown in Table A, the height and area of the existing building shall be deemed to be acceptable.

**502.1.3 Fire Separation Assemblies.** When a change of use is made to a higher hazard category, as shown in Table 5-A, fire separation assemblies in mixed-use buildings shall comply with the requirements for mixed occupancies in the Building Code.

**EXCEPTION:** Where the fire-separation assemblies are required to have a one-hour fire resistance rating, existing wood lath and plaster in good condition or existing stud wall clad in  $\frac{1}{2}$ -inch-thick (12.7 mm) gypsum wallboard shall be permitted.

### 502.2 Means of Egress—General.

**502.2.1** When a change of use is made to a higher hazard category (lower number) as shown in Table B, egress capacity, arrangement of the means of egress, and all elements of the means of egress, including but not limited to the exit access, exit discharge, occupant load, corridors, doors, enclosures, stairs and ramps, guards and handrails, means of egress doorways, fire escapes and exit lighting and signs, shall comply with the requirements of Chapter 10 of the Building Code.

#### EXCEPTIONS:

1. Stairways shall be enclosed in compliance with applicable portions of Section 503.2.
2. Existing stairways including handrails and guards complying with the requirements of Chapter 4 shall be permitted for continued use subject to approval of the building official.
3. Any stairway replacing an existing stairway within a space where, because of existing construction, the pitch or slope cannot be reduced, shall not be required to comply with the maximum riser height and minimum tread depth requirements.
4. Existing corridor walls constructed of wood lath and plaster in good condition or  $\frac{1}{2}$ -inch-thick (12.7 mm) gypsum wallboard shall be permitted.
5. Existing corridor doorways, transoms and other corridor openings shall comply with the requirements in Sections 403.2.11, 403.2.11.3 and 403.2.11.4.
6. Existing dead end corridors shall comply with the requirements in Section 403.2.17.
7. An existing operable window with a clear opening area of at least 4 square feet, and with minimum opening height and width of 22 inches and 20 inches respectively shall be accepted as an egress window.

**502.2.2** When a change of use is made to an equal or lesser hazard category as show in Table B, existing elements of the means of egress shall comply with the requirements of Section 403 for the new occupancy classification. Newly constructed or configured means of egress shall comply with the requirements of Chapter 10 of the Building Code.

**EXCEPTIONS:** 1. Any stairway replacing an existing stairway within a space where, because of existing construction, the pitch or slope cannot be reduced, shall not be required to comply with the maximum riser height and minimum tread depth requirements.

2. Compliance with Section 403 is not required where the change of use complies with the requirements of Section 501.6.

**502.2.3** Egress capacity shall meet or exceed the occupant load as specified in Section 403 if the change of use is to an equal or lesser hazard category when evaluated in accordance with Table B.

## SECTION 503 — ENCLOSURE OF VERTICAL SHAFTS

**503.1 General.** Vertical shafts are permitted to be designed to meet the requirements of atria as required by the Building Code or the requirements of this section.

**503.2 Stairways.** Interior stairways shall be enclosed as required by the Building Code when a change of occupancy is made to a higher hazard group as shown in Table 5-B.

### EXCEPTIONS:

1. In other than Group I, an enclosure will not be required for openings serving only one adjacent floor and not connected with corridors or stairways serving other floors.

2. Unenclosed existing stairways that do not exceed four stories above grade need not be enclosed in a continuous vertical shaft if each story is separated from other stories by one-hour fire-resistive construction or approved wired glass set in steel frames and all exit corridors are sprinklered. The openings between the corridor and occupant space shall have at least one sprinkler head above the openings on the tenant side. The sprinkler system shall be permitted to be supplied from the domestic water-supply system, provided the system is of adequate pressure, capacity and sizing for the combined domestic and sprinkler requirements.

3. Existing penetrations of stairway enclosures are permitted if they are properly protected in accordance with the Building Code.

4. Existing mechanical penetrations if protected by fire/smoke dampers.

**503.3 Shafts enclosing commercial kitchen exhaust ducts.** When a change of occupancy is made to a higher hazard category as shown in Table 5-B, shafts enclosing commercial kitchen exhaust ducts shall be enclosed as required by the Building Code.

**503.3 Other Vertical Shafts.** Interior vertical shafts other than stairways and those enclosing commercial kitchen exhaust ducts, including but not limited to elevator hoistways and service and utility shafts, shall be enclosed as required by the Building Code when there is a change of use to the same or a higher hazard category in Table 5-B.

### EXCEPTIONS:

1. Existing one-hour interior shaft enclosures shall be accepted where a higher rating is required.

2. Vertical openings, other than stairways, need not be enclosed if the entire building is provided with an approved automatic sprinkler system.

3. Where one-hour fire-resistive floor construction is required, vertical shafts need not be enclosed where floor penetrations are fire stopped at every floor level.

**503.3.1 Openings.** All openings into existing vertical shaft enclosures shall be protected by fire assemblies having a fire-protection rating of not less than one hour and shall be maintained self-closing or shall be automatic-closing by actuation of a smoke detector. All other openings shall be fire protected in an approved manner. Existing fusible link-type automatic door-closing devices shall be permitted in all shafts except stairways if the fusible link rating does not exceed 135°F (75°C).

**503.4 Separation of Occupancies.** When a change of occupancy is made to a higher hazard group, as shown in Table 5-C, occupancy separations shall be provided as specified in the Building Code.

## SECTION 504 — EXTERIOR WALL FIRE-RESISTANCE RATINGS

**504.1** When a change of use is made to a higher hazard category as shown in Table 5-D, exterior walls shall have fire resistance and exterior opening protection as required in the Building Code. This provision shall not apply to walls at right angles to the property line.

**EXCEPTION:** Where a fire-resistance rating greater than two hours is required for a building of any type of construction, existing noncombustible exterior walls having a fire-resistance rating equivalent to two hours as determined by the 1997 Uniform Code for Building Conservation Guideline 2 and Appendix, or other approved sources, shall be accepted, provided the building does not exceed three stories in height and is classified as one of the following occupancy classifications: A-3 with an occupant load of less than 300, B, F, M or S.

**504.2** When a change of use is made to an equal or lesser hazard category, as shown in Table 5-D, existing exterior walls, including openings, shall be accepted.

**504.3 Opening Protection.** Openings in exterior walls shall be protected as required by the Building Code.

**EXCEPTIONS:**

1. Protected openings shall not be required in buildings in Group R that do not exceed three stories in height and which have a fire separation distance of at least 3 feet (914 mm).
2. Where exterior opening protection is required, an automatic sprinkler system throughout may be substituted for opening protection.
3. Exterior opening protection is not required when the change of occupancy is to an equal or lower hazard classification in accordance with Table 5-D.

## SECTION 505 — STRUCTURAL SAFETY

**505.1 Live Loads.** Any existing structure in which the proposed new occupancy requires floor live loads equal to or less than required for the existing occupancy is permitted to be continued in use for the originally approved live loads, provided that the structure is not dangerous and is adequate for the proposed occupancy. If the approved live load is less than required by the Building Code, the areas designed for the reduced live load shall be posted with the approved load or shall be structurally strengthened to support the new load. Placards shall be of an approved design.

**EXCEPTION:** Analysis and test methods for evaluation of existing materials may use the methods specified in the code under which the building was constructed, or other standards as approved by the building official.

**505.2 Vertical Loads on Roofs.** Buildings and structures shall comply with the roof load requirements of the Building Code for roof live load.

**EXCEPTION:** Existing roofs shall be permitted to be retained provided any dangerous or overloaded conditions are corrected and the roof dead load is not increased by use, reroofing or added equipment.

**505.3 Earthquake Loads.** When a change of occupancy results in an existing building being reclassified to a higher hazard category, as shown in Table 5-E, the building shall be strengthened to meet the Building Code seismic requirements for new buildings.

**EXCEPTIONS:**

1. For buildings located in Seismic Zones 0, 1 and 2A seismic map areas having a value of  $S_{DI} < 0.2$ , strengthening the building to meet the seismic requirements for new buildings is required only where the change of occupancy results in a building being reclassified to hazard category I (highest). All other buildings so located shall not be required to be strengthened.
2. Unreinforced masonry bearing wall buildings shall be strengthened to meet the requirements of the Building Code.

**505.4 Wind and Snow Loads.** When a change of occupancy results in an existing building being assigned a higher wind load or snow load importance factor, in accordance with the Building Code, the building shall be strengthened to meet the Building Code wind load or snow load requirements, respectively, for new buildings.



## SECTION 506 — HANDRAILS AND GUARDS

**506.1 Handrails.** Existing stairways shall comply with the handrail requirements in Section 403.2.4.

**506.2 Guards.** Existing guards shall comply with the guardrail requirements in Section 403.2.5.

## SECTION 507 — HEALTH AND HYGIENE

**507.1 Light and Ventilation.** Light and ventilation shall comply with the requirements of the Building Code for the new occupancy classification.

## SECTION 508 — PLUMBING REQUIREMENTS

**508.1** When the occupancy of an existing building or part of an existing building is changed such that the new occupancy is subject to increased or different plumbing fixture requirements or to increased water supply requirements in accordance with the Plumbing Code, the intent of the respective Plumbing Code provisions shall be complied with.

**508.2** If the new occupancy is a food handling establishment, all existing sanitary waste lines above the food or drink preparation or storage areas shall be panned or otherwise protected to prevent leaking pipes or condensation on pipes from contaminating food or drink. New drainage lines shall not be installed above such areas, and shall be protected in accordance with the Plumbing Code.

**508.3** If the new occupancy will produce grease or oil-laden wastes, it shall be provided with interceptors as required in the Plumbing Code.

**508.4** If the new occupancy will produce chemical wastes, the following shall apply:

1. If the existing piping is not compatible with the chemical waste, the waste shall be neutralized prior to entering the drainage system or the piping shall be changed to a compatible material.
2. No chemical waste shall discharge to a public sewer system without the approval of the sewage authority.

**508.5** If the Occupancy classification is changed to Group I-2, the plumbing system shall comply with the applicable requirements of the Plumbing Code.

## SECTION 509 — MECHANICAL REQUIREMENTS

**509.1** Where the occupancy of an existing building or part of an existing building is changed such that the new occupancy is subject to different kitchen exhaust requirements or to increased mechanical ventilation requirements in accordance with the Mechanical Code, the intent of the respective Mechanical Code provisions shall be complied with.

## SECTION 510 — ELECTRICAL REQUIREMENTS

**510.1** Where the occupancy of an existing building or part of an existing building is changed to one of the following special occupancies, the electrical wiring and equipment of the building or portion thereof that contains the proposed occupancy shall comply with the applicable requirements of the Electrical Code, regardless of whether a change of occupancy classification is involved:

1. Hazardous (classified) locations,
2. Commercial garages, repair and storage,
3. Aircraft hangars,
4. Gasoline dispensing and service stations,
5. Bulk storage plants,
6. Spray application, dipping and coating processes,
7. Health care facilities,
8. Places of assembly,

9. Theaters, audience areas of motion picture and television studios, and similar locations,
10. Motion picture and television studios, and similar locations,
11. Motion picture projection booths, and
12. Agricultural buildings.

**510.2** When the occupancy of an existing building or part of an existing building is changed, all dangerous conditions shall be corrected, without requiring that all other parts of the electrical system comply with the current Electrical Code.

**510.3** When the occupancy of an existing building or part of an existing building is changed, electrical service shall be upgraded to meet the requirements of the Electrical Code for the new occupancy.

**510.4** When the occupancy of an existing building or part of an existing building is changed, the number of electrical outlets shall comply with the Electrical Code for the new occupancy.

**TABLE 5-A—HAZARD CATEGORIES AND CLASSIFICATIONS: HEIGHTS AND AREAS**

RELATIVE HAZARD	USE CLASSIFICATION
1 (Highest Hazard)	H
2	A, I, M, R, U
3	E, F-1, S-1,
4 (Lowest Hazard)	B, F-2, S-2,

**TABLE 5-B—HAZARD CATEGORIES AND CLASSIFICATIONS: LIFE SAFETY AND EXITS**

RELATIVE HAZARD	USE CLASSIFICATION
1	H
2	I-2, I-3, I-4
3	A, B, E, F-1, I-1, M, R, S-1
4	F-2, S-2, U

**TABLE 5-C—HAZARD CATEGORIES AND CLASSIFICATIONS: OCCUPANCY SEPARATIONS**

RELATIVE HAZARD	USE CLASSIFICATION
1	H, I, S-3, S-4
2	A, B, F, M, S-1, S-2, S-5
3	E
4	R-1, U
5	R-3

**TABLE 5-D—HAZARD CATEGORIES AND CLASSIFICATIONS: EXPOSURE OF EXTERIOR WALLS**

RELATIVE HAZARD	USE CLASSIFICATION
1	H
2	F-1, M, R, S-1
3	A, B, E, I, R
4	F-2, S-2, U

TABLE 5-E—HAZARD CATEGORIES AND CLASSIFICATIONS: EARTHQUAKE SAFETY

RELATIVE HAZARD	USE CLASSIFICATION
1	H-1, H-4 and H-5 with highly toxic materials I-2 (hospitals) B (fire, rescue and police stations) B (emergency preparedness centers) B (primary communication facilities) S (post-earthquake recovery vehicle garages) F (power-generating stations and other utility facilities required for emergency backup)
2	A, E, 1-1, 1-2 (all others), I-3, H-2, H-3, H-5 (not listed in Relative Hazard 1) F (power-generating stations and other public utilities not listed in Relative Hazard 1) B (used for adult education with an occupant load > 500) Any building with an occupant load > 5000
3	I-4, R-1, R-2, R-4
4	F-1, S-1, H-4
5	B (all others), F-2, M (all others), S-2
6	R-3, U

## Chapter 6

### HISTORIC STRUCTURES

#### SECTION 601 — PURPOSE

It is the intent of this chapter to provide means for the preservation of historic buildings.

**601.1 General.** Historic buildings shall comply with the provisions of this chapter, or with the provisions of Chapters 4 and 5, relating to their repair, renovation, alteration, reconstruction, movement and change of occupancy .

**601.2 Alternatives.** A historic building undergoing repair, alteration or change of occupancy shall be investigated and evaluated. If it is intended that the building meet the requirements of this chapter, a written report shall be prepared and filed with the building official by a registered design professional when in the opinion of the official, such a report is necessary. Such report shall be in accordance with Chapter 1 of these provisions and shall identify each required safety feature in compliance with this chapter and where compliance with other chapters of these provisions would be damaging to the contributing historic features. In high seismic zones, a structural evaluation describing, as a minimum, a complete load path and other earthquake-resistant features shall be prepared. In addition, the report shall describe each feature not in compliance with these provisions and demonstrate how the intent of these provisions is complied with in providing an equivalent level of safety.

**EXCEPTION:** Compliance alternatives approved by the building official are allowed when the following criteria are met:

1. Conformance with the general intent of this code.
2. Compliance with the minimum standards required by Chapter 4 and the specific occupancy requirements of this code.
3. Conformance with the requirements of Chapter 5 when a change of occupancy occurs, except as modified in this chapter.
4. All unsafe and substandard conditions described in this code are corrected.
5. The restored building or structure shall be no more hazardous, based on life–safety, fire–safety and sanitation, than the building was before renovation.

**601.3 Special Occupancy Exceptions—House Museums.** When a building that is in Occupancy Classification R–3 is also used for A, B or M purposes such as museum tours, exhibits and other public assembly activities, the building official may make a determination that the Occupancy Classification is R-3 when life–safety conditions can be demonstrated in accordance with Section 901.2. Adequate means of egress in such buildings, which may include a means of maintaining doors in an open position to permit egress, a limit on building occupancy to an occupant load permitted by the means of egress capacity, a limit on occupancy of certain areas or floors, and/or supervision by a person knowledgeable in the emergency exiting procedures, shall be provided.

#### SECTION 602 — REPAIRS

Repairs to any portion of a historic building or structure are permitted to be made with original materials and original methods of construction, subject to the provisions of this chapter.

**602.1 Dangerous Buildings.** When a historic building is determined to be dangerous, as defined in the building code, no work shall be required except as necessary to correct identified unsafe conditions.

**602.2 Relocated Buildings.** Foundations of relocated historic buildings and structures shall comply with the Building Code. Relocated historic buildings shall otherwise be considered a historic building for the purposes of this code. Relocated historic buildings and structures shall be so sited that exterior wall and opening requirements comply with the Building Code or the compliance alternatives of this code.

**602.3 Repairs and Alteration—General.** Historic buildings undergoing repairs or alterations shall comply with all of the applicable requirements of Chapter 4 of these provisions except as specifically permitted in this chapter.

**602.4 Replacement.** Replacement of existing or missing features using original materials shall be permitted. Partial replacement for repairs that match the original in configuration, height and size shall be permitted. Such replacements shall not be required to meet the materials and methods requirements in Section 401.2 of these provisions.

**EXCEPTION:** Replacement glazing in hazardous locations shall comply with the safety glazing requirements of the Building Code.

**602.5 Roof Covering.** The existing type of roof covering shall be permitted to be continued and replaced with the same materials if the historic materials are documented to the satisfaction of the building official.

## SECTION 603 — FIRE SAFETY

**603.1 General.** Every historic building that does not conform to the construction requirements specified in this code for the occupancy or use and that constitutes a distinct fire hazard as defined herein shall be provided with an approved automatic fire-extinguishing system as determined appropriate by the building official. However, an automatic fire-extinguishing system shall not be used to substitute for, or act as an alternate to, the required number of exits from any facility.

**603.2 Means of Egress.** Existing door openings and corridor and stairway widths of less than that specified elsewhere in this code may be approved, provided that in the opinion of the building official there is sufficient width and height for a person to pass through the opening or traverse the means of egress.

When approved by the building official, the front or main exit doors need not swing in the direction of the path of exit travel, provided other approved means of egress having sufficient capacity to serve the total occupant load are provided.

**603.3 Transoms.** In fully sprinklered buildings of Occupancy Classifications 1-1, R-1 and R-2 existing transoms in corridors and other fire-rated walls may be maintained if fixed in the closed position. A sprinkler shall be installed on each side of the transom.

**603.4 Interior Finishes.** The existing finishes of walls and ceilings shall be accepted when it is demonstrated that they are the historic finishes.

**603.5 Stairway Enclosure.** In buildings of three stories or less, exit enclosure construction shall limit the spread of smoke by the use of tight-fitting doors and solid elements. Such elements are not required to have a fire rating.

**603.6 One-hour Fire-resistive Assemblies.** Where one-hour fire-resistive construction is required by these provisions, it need not be provided regardless of construction or occupancy when the existing wall and ceiling finish is wood lath and plaster.

**603.7 Glazing in Fire-rated Systems.** Historic glazing materials in interior walls required to have one-hour fire rating may be permitted when provided with approved smoke seals and when the area affected is provided with an automatic sprinkler system.

**603.8 Stairway Railings.** Grand stairways shall be accepted without complying with the handrail and guardrail requirements. Existing handrails and guards shall be permitted to remain, provided they are not structurally dangerous.

### 603.9 Guards.

**603.9.1 Height.** Existing guardrails shall comply with the requirements of Section 403.2.5.

**603.9.2 Guard Openings.** The spacing between existing intermediate railings or openings in existing ornamental patterns shall be accepted. Missing elements or members of a guard may be replaced in a manner that will preserve the historic appearance of the building or structure.

**603.10 Exit Signs.** Where exit sign or egress path marking location would damage the historic character of the building, alternate exit signs are permitted with approval of the building official. Alternative signs shall identify the exits and egress path.

### 603.11 Automatic Fire-extinguishing Systems.

**603.11.1** Every historical building which cannot be made to conform to the construction requirements specified in the Building Code for the occupancy or use, and which constitutes a distinct fire hazard shall be deemed to be in compliance if provided with an approved automatic fire extinguishing system.

Automatic fire extinguishing systems shall be installed in R-1, R-2, R-4, I and E occupancies as required by this Code. High rise buildings shall have an automatic fire extinguishing system as required by Section 409.

**EXCEPTION:** When an alternative life-safety system is approved by the enforcing agency.

**603.11.2** An automatic fire extinguishing system shall not be used to substitute for or act as an alternative to the required number of exits from any facility.

**603.11.3 Fire Alarm System and Smoke Detector Systems.** Group R-1, R-2, and R-4 occupancies shall have, at a minimum, single station, interconnected smoke detectors in the sleeping/dwelling units. High rise, I and E occupancies shall have a manual fire alarm system per the requirements of Section 409.

## SECTION 604 — CHANGE OF OCCUPANCY

**604.1 General.** Historic buildings undergoing a change of occupancy shall comply with the applicable provisions of Chapter 5, except as specifically permitted in this chapter. When Chapter 5 requires compliance with specific requirements of Chapter 4, and when those requirements are subject to the exceptions in Section 602, the same exceptions shall apply in this section.

**604.2 Building Area.** The allowable floor area for historic buildings undergoing a change of occupancy shall be permitted to exceed the allowable areas specified in Chapter 5 by 20 percent.

**604.3 Location on Property.** Historic structures undergoing a change of occupancy to a higher hazard category, in accordance with Section 501.5 of these provisions, may use alternative methods to comply with the fire-resistance and exterior opening protective requirements. Such alternatives shall comply with Section 601.1.

**604.4** Required occupancy separations of one-hour may be omitted when the building is provided with an approved automatic sprinkler system throughout.

**604.5 Roof Covering.** Regardless of occupancy or occupancy classification, roof-covering materials not less than Class C shall be permitted where a fire-retardant roof covering is required.

**604.6 Means of Egress.** Existing door openings and corridor and stairway widths less than those that would be acceptable for nonhistoric buildings under these provisions shall be approved, provided that in the opinion of the building official, there is sufficient width and height for a person to pass through the opening or traverse the exit and that the capacity of the exit system is adequate for the occupant load, or where other operational controls to limit occupancy are approved by the building official.

**604.7 Door Swing.** When approved by the building official, existing front doors need not swing in the direction of exit travel, provided other approved exits having sufficient capacity to serve the total occupant load are provided.

**604.8 Transoms.** In corridor walls required to be fire rated by these provisions, existing transoms may be maintained if fixed in the closed position and fixed wired glass set in a steel frame or other approved glazing shall be installed on one side of the transom.

**EXCEPTION:** Transoms conforming to Section 603 of these provisions shall be accepted.

**604.9 Finishes.** Where finish materials are required to have a flame-spread classification of Class III or better, existing nonconforming materials shall be surfaced with an approved fire-retardant paint or finish.

**EXCEPTION:** Existing nonconforming materials need not be surfaced with an approved fire-retardant paint or finish when the building is equipped throughout with an automatic fire-suppression system installed in accordance with the Building Code and the nonconforming materials can be substantiated as being historic in character.

**604.10 One-hour Fire-resistive Assemblies.** Where one-hour fire-resistive construction is required by these provisions, it need not be provided regardless of construction or occupancy where the existing wall and ceiling finish is wood lath and plaster.

**604.11 Stairs and Railing.** Existing stairways shall comply with the requirements of these provisions. The building official shall grant alternatives for grand stairways and railings if alternative stairways are found to be acceptable or if judged as meeting the intent of these provisions. Existing stairways shall comply with Section 603.

**604.12 Exit Signs.** The building official may accept alternate exit sign locations where such signs would damage the historic character of the building or structure. Such signs shall identify the exits and exit path. Emergency lighting systems shall be installed as required by the Building Official.

**604.13 Exit Stair Live Load.** Existing historic stairways in buildings changed to occupancy classifications R-1 and R-2 shall be accepted where it can be shown that the stairway can support a 75 pounds per square foot (366 kg/m<sup>2</sup>) live load.

**604.14 Natural Light.** When it is determined by the building official that compliance with the natural light requirements of Section 507 will lead to loss of historic character and/or historic materials in the building, the existing level of natural lighting shall be considered acceptable.

**604.15 Accessibility Requirements.** The accessibility requirements contained in these provisions shall apply to historic buildings undergoing alterations, renovations, reconstruction or a change of occupancy. If the historic character of the building is adversely affected, then alternative provisions for accessibility shall be permitted.

## **SECTION 605 — STRUCTURAL SAFETY**

**605.1 Vertical and Seismic Loads.** Historic buildings shall comply with the requirements of Chapters 4 and 5 for floor live loads.

**EXCEPTION:** The building official may accept existing floors and approve operational controls that limit the live load on any floor.



## Chapter 7

### ACCESSIBILITY FOR EXISTING BUILDINGS

**A101.1 Scope.** The provisions of Sections A101.2 through A101.8.5 apply to maintenance, change of occupancy, additions and alterations to existing buildings, including those identified as historic buildings.

**A101.2 Maintenance of facilities.** A building, facility or element that is constructed or altered to be accessible shall be maintained accessible during occupancy.

**A101.3 Change of Occupancy.** Unless technically infeasible, provisions for new construction shall apply to those portions of existing buildings which are altered concurrently with a change of occupancy. In addition, existing buildings that undergo a change of occupancy shall have all of the following accessible features:

1. At least one accessible entrance.
2. At least one accessible route from an accessible entrance to primary function areas.
3. Signage complying with Chapter 11 of the Building Code.
4. Accessible parking, where parking is being provided.
5. At least one accessible passenger loading zone, where loading zones are provided.
6. At least one accessible route connecting accessible parking and accessible passenger loading zones to an accessible entrance.

Where it is technically infeasible to comply with the new construction standards for any alteration or additional requirements for a change of group or occupancy, the provisions of Sections A101.5 and A101.7 shall apply. Where an area of primary function is altered concurrently with a change of group or occupancy, Section A101.6 shall apply.

**A101.4 Additions.** Provisions for new construction shall apply to additions. An addition that affects the accessibility to, or contains an area of primary function, shall comply with the requirements in Section A101.6 for accessible routes.

**A101.5 Alterations.** A building, facility or element that is altered shall comply with the applicable provisions in the Building Code, unless technically infeasible. Where compliance with this section is technically infeasible, the alteration shall provide access to the maximum extent technically feasible.

#### **EXCEPTIONS:**

1. The altered element or space is not required to be on an accessible route, unless required by Section A101.6.
2. Accessible means of egress required by the Building Code are not required to be provided in existing buildings and facilities.

**A101.5.1 Extent of application.** An alteration of an existing element, space, or area of a building or facility shall not impose a requirement for greater accessibility than that which would be required for new construction. Alterations shall not reduce or have the effect of reducing accessibility of a building, portion of a building, or facility.

## WICHITA EXISTING BUILDINGS REHABILITATION AND CHANGE OF USE CODE

**A101.6 Alterations affecting an area containing a primary function.** Where an alteration affects the accessibility to, or contains an area of primary function, the route to the primary function area shall be accessible. The accessible route to the primary function area shall include toilet facilities or drinking fountains serving the area of primary function.

### EXCEPTIONS:

1. The costs of providing the accessible route is not required to exceed 20 percent of the costs of the alterations affecting the area of primary function.
2. This provision does not apply to alterations limited solely to windows, hardware, operating controls, electrical outlets and signs.
3. This provision does not apply to alterations limited solely to mechanical systems, electrical systems, installation or alteration of fire-protection systems, and abatement of hazardous materials.
4. This provision does not apply to alterations under-taken for the primary purpose of increasing the accessibility of an existing building, facility or element.

**A101.7 Scoping for alterations.** The provisions of Section A101.7.1 through A101.7.14 shall apply to alterations to existing buildings and facilities.

**A101.7.1 Elevators.** Altered elements of existing elevators shall comply with ANSI A117.1 and ASME A17.1. Such elements shall also be altered in elevators programmed to respond to the same hall call control as the altered elevator.

**A101.7.2 Platform lifts.** Platform (wheelchair) lifts complying with ANSI A117.1 and installed in accordance with ASME A17.1 shall be permitted as a component of an accessible route.

**A101.7.3 Stairs and escalators in existing buildings.** In alterations where an escalator or stair is added where none existed previously an accessible route shall be provided in accordance with the Building Code.

**A101.7.4 Ramps.** Where steeper slopes than allowed by the Building Code are necessitated by space limitations, the slope of ramps in or providing access to existing buildings or facilities shall comply with TABLE A101.7.4.

**TABLE A101.7.4  
RAMPS**

<b>SLOPE</b>	<b>MAXIMUM RISE</b>
Steeper than 1:10 but not steeper than 1:8	7 inches
Steeper than 1:12 but not steeper than 1:10	10 inches
For SI: 1 inch = 25.4 mm.	

**A101.7.5 Dining areas.** An accessible route to raised or sunken dining areas, or to outdoor seating areas is not required provided that the same services and decor are provided in an accessible space usable by any occupant and not restricted to use by people with a disability.

**A101.7.6 Performance areas.** Where it is technically infeasible to alter performance areas to be on an accessible route, at least one of each type of performance area shall be made accessible.

**A101.7.7 Assembly areas.** Seating shall adjoin an accessible route that also serves as a means of egress. Where it is technically infeasible to disperse accessible seating throughout an altered assembly area, the minimum required number of wheelchair space clusters shall be one-half of that required by the Building Code. In existing assembly seating areas with a mezzanine, where the main level provides three-fourths or more of the total seating capacity, wheelchair space clusters are permitted to be dispersed on the main level. Each accessible seating area shall have provisions for companion seating.

## WICHITA EXISTING BUILDINGS REHABILITATION AND CHANGE OF USE CODE

**A101.7.8 Sleeping rooms and accommodations.** Where I-1 sleeping rooms, I-2 sleeping rooms or patient rooms, I-3 residential units, or R-1 and R-2 sleeping accommodations are being altered or added, the requirements of the Building Code for accessible alarms apply only to the quantity of spaces being altered or added.

**A101.7.9 Toilet rooms.** Where it is technically infeasible to alter existing toilet and bathing facilities to be accessible, an accessible unisex toilet or bathing facility is permitted. The unisex facility shall be located on the same floor and in the same area as the existing facilities.

**A101.7.10 Dressing, fitting and locker rooms.** Where it is technically infeasible to provide accessible dressing, fitting or locker rooms at the same location as similar types of rooms, one accessible room on the same level shall be provided. Where separate sex facilities are provided, accessible rooms for each sex shall be provided. Separate sex facilities are not required where only unisex rooms are provided.

**A101.7.11 Check-out aisles.** Where check-out aisles are altered in facilities having a selling space of 5,000 square feet (465 m<sup>2</sup>) or more, at least one check-out aisle serving each function shall be made accessible.

**A101.7.12 Dispersion of seating at fixed or built-in tables, counters, or work surfaces.** Accessible eating at fixed or built-in tables, counters or work surfaces shall be distributed throughout the space or facility as much as technically feasible.

**A101.7.13 Sales and service counters.** Where it is technically infeasible for existing counters for sales or distribution of goods or services to be made accessible, an accessible auxiliary counter shall be provided.

**A101.7.14 Thresholds.** The maximum height of thresholds at doorways shall be 3/4 inch (19.1 mm). Such threshold shall have beveled edges on each side.

**A101.8 Historic buildings.** These provisions shall apply to buildings and facilities designated as historic structures that undergo alterations or a change of occupancy, unless technically infeasible. Where compliance with the requirements for accessible routes, ramps, entrances, or toilet facilities would threaten or destroy the historic significance of the building or facility, as determined by the authority having jurisdiction, the alternative requirements of Section 3408.8.1 through 3408.8.5 for that element shall be permitted.

**A101.8.1 Site arrival points.** At least one accessible route from a site arrival point to an accessible entrance shall be provided.

**A101.8.2 Multilevel buildings and facilities.** An accessible route from an accessible entrance to public spaces on the level of the accessible entrance shall be provided.

**A101.8.3 Entrances.** At least one main entrance shall be accessible.

**EXCEPTION:** If a main entrance cannot be made accessible, an employee or service entrance that is unlocked while the building is occupied shall be made accessible. The accessible entrance shall have a notification system or be provided with remote monitoring.

**A101.8.4 Toilet and bathing facilities.** Where toilet rooms are provided at least one accessible toilet room complying with the Building Code shall be provided.

**A101.8.5 Ramps.** The slope of a ramp run of 24 inches (610 mm) maximum shall not be steeper than one unit vertical in eight units horizontal (12-percent slope).